iis

is-

zen

oit,

ling

ales

and

ning

3LE

ter,

able

han

evel.

rter

the

ssifi-

Issued Every Monday at 5229 Cass Ave., Detroit 2, Mich.

> **JUNE 18,** 1945

Vol. 45, No. 7, Serial No. 848. Established 1926.

Reentered as second-class matter October 3, 1936 at the post office at Detreit, Michigan, under the Act of March 3, 1879. Trade Mark Registered U. S. Patent Office. Copyright, 1945, by Business News Publishins Co.

Inside Dope

By George F. Taubeneck

It Seems We Have to Move Twelve Good Women and True A Heap O' Livin' That Famous Picture Arch Black Hears from Friends

t Seems We Have to Move

One of these days AIR CONDITIONING REFRIGERATION NEWS will have a ew address. It seems only fair to warn you now, because we have been ocated at 5229 Cass Ave., Detroit, or so long that it may take a great nany reminders on our part to preent confusion on the part of our orrespondents and visitors.

What's our new address to be? parned if we know. You see, we are not moving by choice. Extravild horses couldn't drag us out of ir wonderful abode. But the law is he law. And the law says we have get out of here.

When we moved into these grand commodations back in 1933, Wayne University (which is the college of e City of Detroit) was a mere pup. Now Wayne is quite a dog, and has had several litters of off-

For some time we have been almost otally surrounded by Wayne Univerity classrooms. And now they have ken us over, too. The Business News Publishing Co. building at 5229 lass Ave. has been condemned by the ity. It will soon house the Wayne Iniversity Law School and Law

welve Good Women and True

Ever since last October we have en embroiled in the legal proceedngs, trying our best to stave off the evitable. But it's all over now, ys. The jury (12 housewives) has ettled on the price and everything. 's a fait accompli.

All we have to do now is find a lace to go—in a city which is 120% cupied!

If some of our good friends call on some day and find us working in ents in some cowpasture, we hope hey'll understand. There just aren't ough buildings to go around these

This column probably isn't a fitten lace to relate some of our experinces on the witness stand during the rial, but we do hope you'll ask us bout them personally. Even though great deal was at stake, there ere some moments which relieved he tenseness and anxiety.

Heap O' Livin'

Edgar A. Guest's most popular erse bears the title: "It Takes a eap O' Livin' to Make a Home." Our beloved 5229 Cass certainly as had a Heap O' Livin', and it is he finest home most of us oldtimers ere at the NEWS have ever enjoyed. s a matter of fact, several of us ive actually resided on the premises various times. And all of us, ough the years, have spent more me here than we have anywhere

For the benefit of those subscribers ho have never had the good fortune visit 5229 Cass, the Home of R CONDITIONING & REFRIGERATION EWS is situated on a beautifully adscaped plot of ground in Detroit's eliest district—a double square ich includes the Public Library, Art Institute, the Rackham undation, and four big apartment

Trees, grass, space, and culture are lacent. The building itself is an algamation of a magnificent old sion and an extremely modern building-put together by the Concluded on Page 8, Column 1)

G-M Vice Pres.



FRANK R. PIERCE

DETROIT-Frank R. Pierce has been elected a vice-president of the General Motors Corp. by the board of directors.

Coincidentally with this announcement, it was made known that General Motors is creating a new staff activity which will be known as the Employe Cooperation Staff.

This new staff activity will have as its objective the stimulation of employe training and the develop-(Concluded on Page 4, Column 3)

Duggan Heads Sales Of Deepfreeze Line

NORTH CHICAGO, Ill. - F. F. Duggan is the new general sales manager of the Deepfreeze Division of Motor Products Corp., announces G. H. Smith, vice president and general manager.

He will direct sales of both home freezers and industrial chilling equipment.

Mr. Duggan comes to Deepfreeze from the C & D Distributing Co. of Charleston, S. C., in which he was a partner. Before that he was manager of the Hotpoint refrigeration division. A graduate of Georgia Tech's School of Business Administration, Mr. Duggan has had more than 16 years experience in the home appliance field.

Aviation Corp. and Crosley Merger?

CINCINNATI — The Cincinnati Times Star this week stated that current in Cincinnati and New York financial circles that a deal for absorption of Crosley Corp. by Aviation Corp. is nearing completion.'

The deal, it was declared, would involve an exchange of stock in which Crosley shareholders would receive five shares of Aviation Corp. stock for each share of the Crosley

Officials of both companies have been non-committal on the merger reports. Aviation Corp. sometime ago made known its interest in the appliance field postwar.

Detroit Lubricator Ups Doucet, Thorndike

DETROIT - Promotion of E. J. Doucet, general sales manager of Detroit Lubricator Co. to vice president and general sales manager with headquarters in Detroit, and K. B. Thorndike, manager of the western regional office to vice president, western regional office, with headquarters in Chicago, has been announced by C. H. Hodges, Jr.,

Priorities For 'Critical' Jobs

WASHINGTON, D. C. - Dealers who get orders for certain types of commercial refrigeration and air conditioning equipment for which the need is critical (hospitals, food storage installations in which the equipment is completely worn out or beyond repair, etc.) can get a priority rating to speed the delivery of such items by making application on WPB Form 541.

Such applications should be filed with the WPB field offices, which will also process them.

Although the recent revocation of Order L-38 permits all such equipment to be purchased on unrated orders, manufacturers are still required under Priorities Regulation 1 to fill all rated orders first, so that ratings received on the 541 applications will take precedence.

Only certain types of equipment will be eligible for ratings. While (Concluded on Back Page, Column 1)

Scaife Will Direct G-E's Advertising

BRIDGEPORT, Conn. - A. L. Scaife has been appointed advertising and sales promotion manager of the General Electric Co.'s appliance and merchandise department, it has been announced by C. R. Pritchard, general sales manager.

The appointment is one of several involving major changes in the department's advertising and sales promotion division.

Mr. Scaife, who succeeds B. W. Bullock, who has resigned, will also continue to serve as merchandising manager for the department. In his new capacity, he will be in charge of (Concluded on Page 4, Column 4)

New Haven Dealers Won't Bar Handling New Firms' Products

NEW HAVEN, Conn.-Refrigerator and appliance dealers serving the New Haven area have formed an organization, but have not voted to handle "only those lines of appliances which were made before the war," as erroneously reported elsewhere.

Terming the erroneous statement a bad reporting job," one of the members of the group explained what the group was driving at as follows:

"Within the next few months, there may be releasing of 'gyp' merchandise that has been made illegally during the war period. We, as dealers, do not intend to handle this type of merchandise.

"We do intend to handle any merchandise made by a reputable manufacturer approved by an authoritative approval body such as Underwriters Laboratories, etc. It is not our desire to retard the sale of any legitimate merchandise, whether made by a new manufacturer in the field or an old established manufacturer, providing it meets with the standards."

Main objectives of the New Haven dealers' organization, it was stated, are to better relations among dealers and to exchange ideas that will promote better merchandise and eliminate petty grievances. It will be informal in its organization, with no officers elected and no dues levied. Monthly luncheon meetings are planned at which those attending will express their ideas on current problems.



Vice president of Ansul Chemical Co., he has just been elected to the presidency of Refrigeration **Equipment Manufacturers Asso**ciation in the important year of reconversion.

Group of Employes Gets Control of Vilter Mfg. Co.

MILWAUKEE, June 14-E. B. Tilton, new president of the Vilter Mfg. Co. of Milwaukee, one of the pioneer manufacturers of refrigeration and air conditioning equipment, announced today that its control and management had passed to a group of employe executives.

New officers of the company are: E. B. Tilton, president, treasurer, and general manager; A. A. Silverman, vice president; L. E. Loos, secretary; and M. F. Grady, assistant secretary and assistant treasurer.

The re-organization comes six weeks after the former owners, members of the Vilter family, sold their stock for \$1,300,000 to Foundation, Inc., a charitable trust.

Subsequently the Vilter Mfg. Co. was completely separated from Foundation, Inc., and is not now associated in any way whatsoever with Foundation, Inc., or any other group, firm, or business, according to Mr. Tilton.

The Vilter Mfg. Co. will be operated under a board of directors consisting of Vilter employes. The board members are E. B. Tilton, A. A. (Concluded on Page 4, Column 3)

Monitor Seeks 6,000 Dealers

NEW YORK CITY-Promotional campaign to sign up 6,000 dealers to handle the Monitor line of 24 electrical and gas appliances has been started by Monitor Equipment Corp. here, announces T. K. Quinn, presi-

Twenty-four manufacturers have agreed to produce exclusive lines under the Monitor trade name for distribution through the firm's 60 distributors, each of whom holds an equal share of the total stock, Mr. Quinn also said.

Beginning in October, a national advertising campaign will back distributors and dealers in promoting the line, it was announced.

Wide range of appliances will be manufactured for distribution by Monitor, including self-contained air conditioners, refrigerators, home freezers, electric and gas ranges, cleaners, washers, radios, television sets, roasters, sewing machines, gas oil, and electric space heaters, fans, irons and ironing machines, toasters, (Concluded on Page 29, Column 1)

Frank Pierce New Dealer Can Get Rema's President WPB's Okay on Household Unit Mfrs. Due Soon

WASHINGTON, D. C.-Within five days of WPB's announcing the program to produce 265,000 household refrigerators in the third quarter, applications covering more than 200,000 units had been received from manufacturers, WPB officials informed the Labor Advisory Committee of the domestic mechanical refrigerator industry here recently.

WPB expects to authorize production on the basis of these WPB-3700 applications within a few days, but the committee was told that no information was as yet available on future programming of refrigerators. As soon as practicable all programming will be dropped, WPB heads

No further details regarding distribution of the new refrigerators have been announced. WPB originally indicated that all units manufactured under the program would go to the "stockpile" of refrigerators, distribution of which is controlled by Order L-5-d.

Under this regulation persons who wish to buy a refrigerator must file application with WPB offices on form WPB-882. Upon approving the application, WPB issues a certificate of transfer (form WPB-867) which the purchaser then presents to the dealer.

To obtain a refrigerator for this sale the dealer, if necessary, certifies to his distributor that he has received certificate of transfer No. for a new refrigerator. The distributor files a similar notice with the manufacturer if he likewise has no refrigerators in stock.

Production schedules for 265,000 refrigerators in the third quarter should provide approximately 17,000 jobs, estimated on the basis of average employment and production in the industry in a base year, WPB informed the labor advisory com-

Refrigerator Pricing **Delay Seen Likely**

WASHINGTON, D. C. - Prices which manufacturers can charge for household electric refrigerators which they will be permitted to make beginning July 1 will be set by the OPA by that time, OPA Administrator Chester Bowles said last week.

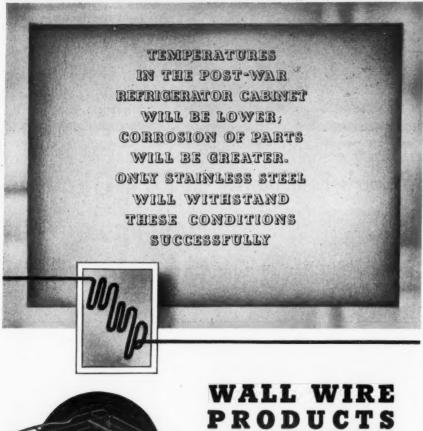
However, he indicated that retail prices would not be set simultaneously, and that it might be some time before such prices would be determined. It is s imply a matter of getting the work done within OPA, he declared.

Thus, even though manufacturers' prices may be established by July 1, dealers will likely be in the dark as to what prices the new models will sell for, and how much of any manufacturers price increases they will be expected to absorb.

Philco To Be Ready In Third Quarter

PHILADELPHIA - Philco Corp. will resume production of household electric refrigerators in the quarter beginning July 1 in accordance with the WPB program for the industry, it was announced June 12 by John Ballantyne, president, in a letter to stockholders.

"Arrangements have been completed to increase Philco production of radio receiving sets and refrigerators very considerably above prewar levels as soon as government regulations permit," Mr. Ballantyne



TINNED REFRIGERATOR SHELVES AND WELDED WIRE PRODUCTS

Admiral Announces Promotion Plans for Postwar Lines at Distributor Meetings CHICAGO-Admiral Corp. is announcing merchandising plans and unveiling models of postwar electric refrigerators, radios, electric ranges, and home freezers at a series of home office and regional distributor meetings.

The gatherings began in Chicago June 7.

Three models of refrigerators, two of electric ranges, seven models of radios and radio-phonographs, and the home freezer are being shown at the meetings, according to Wallace C. Johnson, manager of field activities for Admiral.

At each regional gathering comprehensive merchandising plans for the retail sale of Admiral products to the consumer, when first available, will be given, together with Admiral's pre-selling deal identification plan. The display of postwar merchandise also will be viewed at each meeting.

The distributors will be given a picture of Admiral's over-all production plans by Mr. Johnson and will receive current marketing data on the radio and accessory line from Richard A. Graver, vice president in charge of radio division; on refrigerators and home freezers from L. H. D. Baker, vice president, appliance division; on ranges from Harold D. Conklin, manager, electric range division; and on advertising from Semour Mintz, advertising manager.

They will also get their first glimpse of the new Admiral X-Ray presentation book for consumer sell-

ing; copies of the free consumer booklet, "A Promise from Admiral," now being advertised in national magazines; signs of various types, and an elaborate dealers' window display for national distribution.

The four-piece window display consists of two flasher-light illuminated pieces, each 48 inches high. It features a radio console with the Admiral five-second automatic record changer, and the Dual-Temp refrigerator. One part of the display invites the window shopper to enter the store and get a prevue of Admiral products through the X-Ray presentation book. Construction is such that the pieces may be used separately or as a continuous display unit.

The dealer identification program will include a comprehensive program of classified 'phone book advertising. Highway signs and markers, interior signs, an advertising clock, and two types of standard 6-foot neon signs also will be displayed.

The distributors also will learn that they will be made exclusive outlets for the sale of Admiral Flex-O-Plan display units for store interiors to all appliance stores, Admiral dealers or not.

NEWA Launches Drive To Bring War Veterans Into Electrical Field

NEW YORK CITY - Window or counter cards have been prepared by the National Electrical Wholesalers Association for distribution throughout the industry in an effort to further veteran's employment within the electrical industry.

Picturing a soldier, sailor, and marine, the cards bear a short, encouraging message for ex-service men, technically trained and interested in obtaining employment in the electrical business. Employment application blanks, to

be answered by the ex-service man, will be helpful in determining his qualifications and preferences.

Cards and application blanks can

be procured in desired quantities b any local electrical league or club local industry group, or individual company, at the cost of printing and mailing.

Orders, with remittances to cover cost, should be sent to the Associa tion at 500 Fifth Ave., New York 18

The schedule of prices is: Window or counter cards-\$6 pe hundred.

Application blanks-50 cents pe hundred.

Arousing interest on the part of prospective employes and promoting better public relations locally and nationally will be advantageous at the electrical industry will be in direct competition with all other industries for manpower after the war.

Four steps have been suggested to help the local plan operate success

1. Develop local industry coopera.

2. Stimulate interest in veteran seeking new jobs.

3. Arrange for equitable distribution throughout all branches of the electrical industry of applicants for employment.

4. Exchange, among localities, of information and data about applicants in order to bring about th fullest possible employment.







IN PRE-WAR PARIS, FASHIONABLE CAFE'S FOUND THEY COULD SERVE FRESH FROG LEGS THE YEAR 'ROUND BY KEEP-ING FROGS ALIVE IN WINTER ON FLIES CAUGHT AND FROZEN IN SUMMER.

MODERN REFRIGERATION SUPPLIES MANY UNUSUAL NEEDS .. AND SPEAKING OF SUPPLIES ANSUL LIQUID SULFUR DIOXIDE - ANSUL LIQUID METHYL CHLORIDE ARE IMMEDIATELY AVAILABLE.

Our technical book, "Ansul Refrigerants" (3" Edition) available upon request

ANSUL CHEMICAL COMPANY, MARINETTE, WIS. "Now in our 30th year"

AGENTS FOR KINETIC'S FREON-11, FREON-12 AND FREON-22

The MARKET for HOME FREEZERS FREEZ-ALL LEADS THE NEW HOME FREEZER INDUSTRY

COMPANY

11333 GENERAL DRIVE

PLYMOUTH, MICHIGAN

Makers of STAINLESS STEEL AND

and university extension departments. Freez-All advance consumer advertising has already brought many thousands of mailed inquiries. Any personal survey you care to make will be amazing proof of the size of this great ready made market. A lot of men are going to make a lot of money on home freezers . . . and on Freez-All home freezers in particular. Dealers are now being franchised through exclusive Freez-All distributors. Write for name of Freez-All distributor in your territory.

> FREEZ-ALL DIVISION Portable Elevator Mfg. Co. Dept. T-10

"Never Let a Good Man Down!"

These words have a powerful meaning.

or clui ndividua nting an

part or romoting ally and geous all be in

other in the war

veteran distribu

it appli.

THEY KEEP-ZEN

UAL

HYL

est

VIS.

4-22

Here at Kelvinator they are part of our thinking—our way of doing business. For they are the basis of the soundest franchise ever offered appliance dealers! A "Retail-Minded" franchise based upon the realization that the men who sell

Kelvinator products are entitled to protection from unsound business practices and the *opportunity* for a sound business future.

Protection from the vicious competitive selling practices which result from too many dealers, too many models, and too few sales per dealer.

And opportunity to occupy a position of standing in the community, with permanency and an assured future that provides for the long pull, when the first flush postwar selling boom is over.

To provide that protection and opportunity, Kelvinator's "Retail-Minded" franchise provides for a completely selective dealer organization—an organization not of the greatest number but of the finest retailers ever assembled in the industry.

That franchise is the result of the feeling of every man in Kelvinator that no sale should be considered completed until the product has moved out of the retailer's store.

That's what we mean by "Retail-Minded" Kelvinator . . . a chance to build your future with a sound and progressive organization that will "never let a good man down!"

The most Valuable Franchise in the Appliance Industry



LOOK AHEAD WITH



Every Sunday 4:30-5:00 P. M. EWT for the new NASH-KEL-VINATOR RADIO SHOW, starring the ANDREWS SIS-TERS—Over the entire Blue





SABECO BRONZE SEALS

THE MOST SUCCESSFUL SEALS FOR REFRIGER-ATION AND AIR CONDITIONING EQUIPMENT



Because it will not corrode, seize, score, or pound out even when lubrication fails, SABECO bronze is used by 85% of the refrigerator manufacturers for seals in rotary and reciprocating compressors. It is likewise demonstrating its superiority in the field of air conditioning equipment, where leading manufacturers have recognized that SABECO provides that extra margin of safety and dependability found in no other metal. Made from copper, tin, and lead only, with a maximum of 2/10 of 1% total impurities, SABECO bronze may be the means of prolonging the life and increasing the dependability of your products or equipment. For complete particulars write to Saginaw Bearing Co., 861 S.

Water St., Saginaw, Michigan. Cable address "Sabeco". sabeco bronze

Vilter--

(Concluded from Page 1, Column 4) Silverman, L. E. Loos, C. G. Bach (chief engineer), and W. L. Nahin (general sales manager).

The articles of incorporation of the Vilter Mfg. Co. have been amended so that it is now a non-stock corporation. The net profits of the company will be used primarily for scientific research, for the benefit of employes of the company, for the rehabilitation of War veterans, and for educational purposes.

Mr. Tilton said that the company will continue to manufacture its usual industrial and commercial refrigeration and air conditioning products with newly developed items being added from time to time.

Pierce--

(Concluded from Page 1, Column 2) ment of a two-way flow of information from the people in General Motors to the policy-making executives of the divisions and the corporation as a whole, and vice versa from the latter back to the former.

Mr. Pierce served with Frigidaire for a number of years, beginning in 1921 when he became associated with J. J. Pocock, Inc., Philadelphia distributor for Frigidaire.

In 1932 he joined the Frigidaire Division as manager of household sales, later becoming sales manager. In 1939 he became general sales

manager of the Kelvinator Division of the Nash-Kelvinator Corp. He rejoined General Motors in July, 1943.

Scaife --

(Concluded from Page 1, Column 3) all advertising, sales promotion, and merchandising plans connected with the sale of G-E major appliances, traffic appliances, and construction material. He will be responsible to Mr. Pritchard.

Assistant manager of the division will be George B. Park. E. F. Vickery will be operating manager.

In announcing these appointments, Mr. Pritchard said that, under the new setup, the advertising and sales promotion division will closely parallel the organization structure announced last fall for the sales division of the appliance and merchandise department.

Mr. Scaife joined General Electric 15 years ago as a member of the advertising division of the former specialty appliance department at Nela Park, Cleveland. In 1936 he became advertising and sales promotion manager of that division. Then, in 1939, when specialty appliances were combined with the company's other appliance lines at Bridgeport, he was named merchandising manager of major appliances and subsequently of the entire appliance and merchandise department.

Mr. Park, who as assistant manager will have complete supervision of all creative plans, copy, displays, etc., for the advertising and sales promotion division, came to G-E in 1939 after three years as advertising and sales promotion supervisor of Westinghouse air conditioning. He has served as copy chief in G-E's advertising division at Bridgeport and recently had charge of the appliance and merchandise department's national radio program, the "G-E House Party."

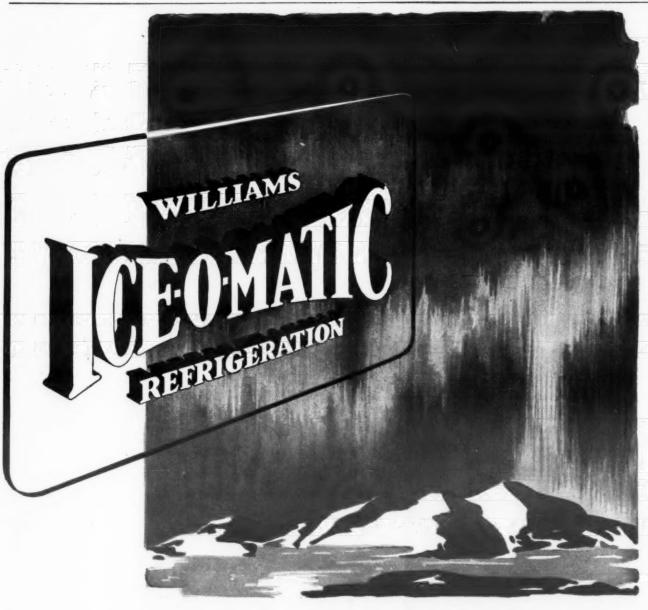
In G-E Ad Post



A. J. SCAIFE

Mr. Vickery, now operating mar ager for the advertising division, wi handle all details of business man agement including accounting, per sonnel, budget control, contracts, and distribution services. Cooperative ad vertising expenditures and policie will also come under his supervision

Mr. Vickery comes to the appliance and merchandise department from Schenectady, N. Y., where he joined G-E in 1930. He has served in the company's general statistics and ac counting divisions, was a traveling auditor and for the past two year was accountant for the Federal an marine division.



Competition in every application of automatic refrigeration will be keen in the postwar era. Proof of performance will be necessary to sell commercial refrigeration equipment. This will require a compressor unit that can be depended upon for economical, troublefree operation. You will find it to your advantage to investigate Williams Ice-O-Matic which offers such features as the exclusive oil rectifier and positive pressure-type lubrication. When present manufacturing restrictions are lifted, Ice-O-Matic Units for all temperature requirements will again be available in $\frac{1}{4}$ to 5 h.p. capacities. Facilities, methods, and skill improved under war's demands will mean units even finer than those which have established enviable records in many fields. Prepare now to meet postwar competition by requesting complete details on Williams Ice-O-Matic—write WILLIAMS OIL-O-MATIC **HEATING CORPORATION, Bloomington, Illinois.**

For continued excellence

in producing tough-tobuild war equipment. Williams employees have four times received the Army-Navy Award, as well as the USAAF 'Approved Quality Control Rating."

17 YEARS WITHOUT A STOP! This Ice-O-Matic Unit located in the Williams plant has run continuously for 17 years. Could you ask more convincing proof that Ice-O-Matic offers the dependability you are seeking?







Davison's Silica Gel was developed under close collaboration with refrigeration engineers who knew only too well the short-comings of ordinary drying agents...Recognized as a basic contribution to the refrigeration industry, Davison's Silica Gel ends moisture troubles and other danger-creating elements that stop most drying agents. Davison's is the complete drying agent, as these advantages prove.

- 1 It is processed especially for the dehydra-tion of refrigerants.
- 2 Its scientifically-determined particle size assures you that the refrigerant will not channel—will be distributed evenly throughout the contributed.
- This even distribution of the refrigerant makes it possible for it to be in complete contact with the entire pore-surface area at all times.
- It removes acids . . . c and other impurities . moisture—instantly. . corrosive compounds
- Its capacity for moisture is not affected by oil.
- 6 It will not cake nor powder.

further...does more

7 It will not attack metals or alloys.

To get this COMPLETE DRYING AGENT that is effective on Freon, Methyl Chlo-ride, Sulphur Dioxide, etc., specify Davison's Silica Gel from your jobberin factory-charged dehydrators or in bulk for refili.

THE DAVISON CORPORATIO Progress through Chemistry BALTIMORE - 3, MD

Canadian exclusive sales agents for DAVISON'S SILICA GEL:

CANADIAN INDUSTRIES LIMITED, General Chemicals Division



st

ing man ision, wil ess man

ing, per acts, and

rative ad policie pervision appliane ent from

he joine

ed in th

and ac

travelin

wo year

deral an

ANNOUNCEMENT





YOUR "DETROIT" JOBBER



WILL NOW HANDLE ALL REPLACEMENTS AND FACTORY REPAIRS OF "DETROIT" EXPANSION VALVES, REFRIGERATION SOLENOID VALVES AND REFRIGERATION CONTROLS

Effective immediately, refrigeration servicemen, dealers and distributors using "DETROIT" products are requested to look to their "DETROIT" Jobber for replacement and factory repairs. These Jobbers carry adequate stocks should immediate replacement be necessary. The product involved can then be returned to our factory for repair in accordance with our repair policy.

Your "DETROIT" Jobbers are Listed Below:

ATLANTA, GA.
Lee S. Besarge Co.
Bowen Refrigeration Supplies, Inc.
Graves Refrigeration ALBANY, N. Y.

ASHEVILLE, N. C. Freck Radio & Supply Co. ALLENTOWN, PA. Larson Supply Co.

ALEXANDRIA, LA.

BALTIMORE, MD. Parks & Hull Appliance Corp. BATON ROUGE, LA. United Service

BEAUMONT, TEX. Standard Brass & Mig. Co.

BILLINGS, MONT. Refrigeration & Industrial Supply Co.

BINGHAMTON, N. Y. W. A. Case & See Mig. Co. BIRMINGHAM, ALA. Auto Service Co. Refrigeration Supplies Distributors

BOSTON, MASS. A.-E. Berden Ce. Melchier, Armstreng, Dessau Ce.

BROOKLYN, N. Y. The Capson Co. Coloman Electrical Supply Co. Excel Retrigoration Supplies, Inc

BUFFALO, N. Y.
Beals, McCarthy & Rogers
W. A. Case & Son Mfg. Ce.

CEDAR RAPIDS, IA. CHARLESTON, S. C.

CHARLESTON, W. VA. Air Conditioning & Ref. Supplies, Inc. CHARLOTTE, N. C.

Bowon Refrigeration Suppr Honry V. Dick & Go., Inc. CHATTANOOGA, TENN.
Perior Machinery Ca.

CHICAGO, ILL. Airo Supply Co.
The Harry Alter Co.
Automatic Heating & Cooling Supply
H. W. Blythe Co.
Chase Retrigeration Supply Co.
Fred C. Kramer Co.

CINCINNATI, O. Morkel Bres. Co. Radio Supply Co. Williams & Co. CLEVELAND, O.

Debes & Ce. Refrigoration S Williams & Co. COLUMBIA, S. C.

COLUMBUS, O.

CORPUS CHRISTI, TEX.

DALLAS, TEX.

DAVENPORT, IA. Republic Electric Co. Gustavo A. Larson Co.

DAYTON, O. Allied Parts Co.

DENVER, COLO.
McCambs Refrigeration

DES MOINES, IA. Donnis Refrigeration Thormal Co., Inc. J. M. Oberc, Inc.

EAST ST. LOUIS, ILL.

EL PASO, TEX. Hays Electrical Motor Service Co. ERIE, PA. W. A. Caso & Son Mig. Co.

EVANSVILLE, IND.
Budlock Retrigeration Supply Co.

FLINT, MICH. FORT LAUDERDALE, FLA.
Auto Parts & Equipment Co.

FORT WAYNE, IND. H. J. Schreeder FORT WORTH, TEX.

FRESNO, CALIF.
Arbeil Retrigoration S

GRAND RAPIDS, MICH.
B. F. Harris & Son
Midwest Retrigeration Supply Co. GREAT FALLS, MONT. Thormal Ca., Inc.

GREEN BAY, WISC. Gustave A. Larsen Co. GREENSBORO, N. C.

Hases, Inc. GREENVILLE, S. C. Texwood Mfg. & Sales Co.

HARRISBURG, PA. HARTFORD, CONN.

Marsdon & Wasser Jesaph Simons Co. HATTIESBURG, MISS.

HOUSTON, TEX. Standord Brass & Mig. Co. Walter Refrigoration Supply Co. INDIANAPOLIS, IND. Control Supply Co. Duncan Supply Co. F. H. Langsonkamp Co.

JACKSONVILLE, FLA. Bowon Refrigeration Suppli Refrigeration Supply Corp.

JAMAICA, N. Y. Sid Harvey, Inc.

KANSAS CITY, MO.
Forsiond Pump & Machinery Co.
Refrigoration Equipment Co.
Superior Refrigoration Supply

KENOSHA, WISC. KINGSTON, N. Y.

KNOXVILLE, TENN. Leisert Engineering Co. LAKE CHARLES, LA. LEXINGTON, KY. United Service Co.

LINCOLN, NEBR.

LITTLE ROCK, ARK.

LONG BEACH, CALIF. Allied Refrigeration Co. Van Supply Co. LOS ANGELES, CALIF. Authorized Supply Co. Pacific Metals, Ltd. Refrigeration Service, Inc Refrigeration Supplies Di

LOUISVILLE, KY. F. H. Langsennamp . S. W. H. Supply Co.

MADISON, WISC.

MEMPHIS, TENN. MIAMI, FLA.

Berner Pease Graves Refrigeration MILWAUKEE, WISC. Gustave A. Larson Co. Refrigeration Parts Co. Thormal Co., Inc.

MINNEAPOLIS, MINN.

MONROE, LA. Motor Supply Co., Inc. MONTGOMERY, ALA. Nelin-McInuis, Inc. Teague Hardware Ca.

NASHVILLE, TENN. J. B. Thomas Co.

NEWARK, N. J. T. W. Binder Co. M. Biazer & Son W. I. Froeman & Co., Inc. Wallwerk Bros., Inc.

NEW HAVEN, CONN. NEWPORT NEWS, VA.

NEW ORLEANS, LA.

NEW YORK CITY, N. Y.
Asina Supply Co.
The Harry Alter Co.
Fideice Industries, Inc.
Malchire, Armstrong, Oessau Co.
Paramount Electric Supply Co. NORFOLK, VA.

OAKLAND, CALIF.

OKLAHOMA CITY, OKLA. Mackianburg Supply Co., Inc. Midoka Supply Co.

OMAHA, NEBR. Donnis Refrigoration Supply Rungg Refrigoration Supply

OSHKOSH, WISC. Gustave A. Larson Co. PEORIA, ILL. Marquetts Equips

PHILADELPHIA, PA.

figures of the year. Valves older than one year may be repaired in accordance with our published repair schedule. Damaged valves repaired or replaced in accordance with a special price schedule. Repaired valves carry a new valve guarantee.

OUTLINE OF "DETROIT" EXPANSION VALVE

REPAIR POLICY

All "DETROIT" Thermostatic and Automatic Expansion Valves are guar-

anteed for twelve months from the date of manufacture against defects

in workmanship and material. Letters A, B, C, D, indicate the 1st, 2nd, 3rd and 4th quarters of the year. They are followed by the last two

> PHOENIX, ARIZ.
> Arizona Retrigeration Supplies, Inc. PITTSBURGH, PA.

Wm. M. Orr Williams & Company Joseph Woodwell Co.

PLATTSBURGH, N. Y. PORT ARTHUR, TEX. Standard Bress & Mig. Co.

PORTLAND, ORE. Retrigerative Supply, Inc.

POUGHKEEPSIE, N. Y.
Peughkeepsie Plumbing Supply Co., Inc PROVIDENCE, R. I.
R. I. Supply & Engineering Co.

REGO PARK, L. I., N. Y. Wholesale Distributers, Inc.

RICHMOND, VA.
Retrigoration Supply Co.
A. R. Tillor, Inc. RIDGEFIELD, N. J. Melchier, Armstrage, Dessau Ca.

ROCHESTER, N. Y.
Outario Motal Supply Co. ROCKFORD, ILL. Gestave A. Larsen Co.

SACRAMENTO, CALIF.

SALT LAKE CITY, UTAH SAN ANTONIO, TEX. United Refrigeration Co.

SAN DIEGO, CALIF.

Refrigeration Supplies Distril Allied Refrigeration Co. SAN FRANCISCO, CALIF. Wyatt R. Brown California Refrigerator Co.

Hinshaw Supply Co. Pacific Metals, Ltri. ST. JOSEPH, MO.

ST. LOUIS, MO. Brass & Copper S M. O. Neisea Co. R. E. Thompson

ST. PAUL, MINN. Thermal Co., Inc. SAVANNAH, GA. James H. McKenna

SCHENECTADY, N.Y. SCRANTON, PA. Castral Service Supply Ca.

SEATTLE, WASH. Retrigerative Supply, Inc. SHREVEPORT, LA. Interstate Electric Co. Standard Brass & Mig. Co.

SIOUX CITY, IA.

Dennis Refrigeration Supply Co. SOUTH BEND, IND.

SPOKANE, WASH.
Retrigerative Sunnly, Inc.

SPRINGFIELD, ILL. U. S. Electric Co. SPRINGFIELD, MASS. C. P. Payson Co.

SPRINGFIELD, MO. Hoffman Supply Co.

SYRACUSE, N. Y. W. A. Case & See Mig. Co. Central Service Supply Co. TAMPA, FLA.

Lee S. Besarge Ce. Bawen Refrigeration Supplies, Inc. Graves Bres. Ce. TOLEDO, O. Heat & Power Engineering Co.

TRENTON, N. J. Jacque's Sales & Suppli

TROY, N. Y. Aird-Dan Co.

TULSA, OKLA. K & M Supply Co. Machine Yool & Supply Co UTICA, N. Y. Vaeth Electric Co.

VALLEY STREAM, L. I., N. Y. WASHINGTON, D. C.

WATERLOO, IA. sly Co.

WEST PALM BEACH, FLA. WHITE PLAINS, N. Y.

WICHITA, KANS. Howard Supply Co. Retrigoration Equipment Co., Inc.

WICHITA FALLS, TEX. WILKES-BARRE, PA.

WILMINGTON, N. C. WORCESTER, MASS.

DETROIT LUBRICATOR COMPANY

General Offices: DETROIT 8, MICHIGAN Division of AMERICAN Radiator and "Standard" Sanitary Corporation

Conadian Representatives — RAILWAY AND ENGINEERING SPECIALTIES LIMITED, MONTREAL, TORONTO, WINNIPEG "DL" Heating and Refrigeration Controls . Engine Safety Controls . Safety Float Valves and Oil Burner Accessories . "Detroit" Expansion Valves

and Refrigeration Accessories . Stationary and Locomotive Lubricators.

als Division

TIO

3,

ore

GENT

pecily bber

Portable Ice 'Fields' Produced In Hawaii Follow Troops In Pacific Island Battles

By W. H. Knowlton American Red Cross Representative, Pacific Ocean Area

HAWAII — (Special) — Astronomical quantities of ice needed by the Army, Navy, Marine Corps, and the American Red Cross in the islandhopping war that is paving the road to Tokyo, are being supplied, in some portion, by "portable" ice fields being constructed in the shops of the Von Hamm-Young Co., commercial refrigeration distributor here.

According to Henry (Hank) Lindquist, general manager of the company's construction and service departments, the quantity of these ice

fields being shipped every month is a military secret . . . but the fact remains that the Von Hamm-Young shops are shipping the product on regular schedules . . . to points in the Pacific theater . . . destination unknown.

Mr. Lindquist reports that the portable ice fields are built in three sizes, having capacities of 300, 500, and 1,000 lbs. per freezing. During recent months the demand for the sizes has been particularly great. The "fields" produce 6, 10,

and 20 fifty-pound cans of pure, clear ice in a 24-hour period.

Constructed of steel and insulated with six inches of "Canec," a product made locally from sugar cane fibers which is now an important by-product of the local sugar industry, the ice fields are equipped with Frigidaire air-cooled compressors. The smaller, or 300-lb. size carries a ½ or \%-hp. machine; the 500-lb. unit requires 1 hp., and the large size, or 1,000-lb. unit, has a 3-hp. compressor as standard equipment. The calcium charge is 200, 300, and 450 lbs., respectively.

The Von Hamm-Young ice fields are 7, 10, and 11 feet long, respectively, and weigh from 1,300 to 3,750 lbs. complete. Selling prices range from \$650 to \$1,500, depending on capacity.

Each unit shipped is equipped with

a set of spare parts, consisting of spare belts, compressor seal, two gallons of special oil, one set of discharge and suction valves, and one Thermo valve.

Along with the manufacture of portable ice fields, the Von Hamm-Young Co. now employs between 35 and 40 refrigeration service and construction men on the Island of Oahu, which is well populated with Frigidaire commercial refrigeration, house. hold boxes, and air conditioning equipment.

16

Indu:

Govt

HOL

frigera

duced

Educat

frigera

Avai

frigera comme

ing the visual

the cou

Films, New Y

accordi

Instr each fil

purpose

I: Gene

II: Tro

Leaks."

erant."

Compre

443-Cooling

444-Expans 445-

Float V 446-

448-Thermo 449 ated Te 450mostatio

451-

densers.

ing Con The fi

Films of hold ser Rocket

commerc Bond Pr Memb which s

films inc

the Cal

nology; Californi

cation:

With A

GREAT

three r

needs c

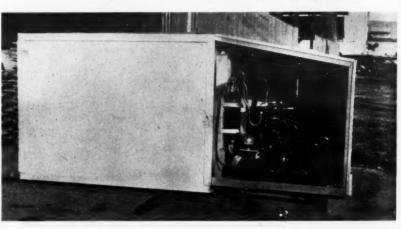
FACTS

tem." 447-

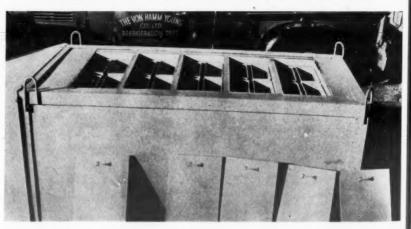
Although activities of the company have been vastly expanded under the stimulus of wartime purchasing, particularly by the Navy, Mr. Lindquist does not expect any let-up in the postwar era. He believes the demand for refrigeration equipment of all types out here will continue.



These soldiers and sailors at Guadalcanal look happy as they receive ice cream cups from the American Red Cross. That's one of the many uses of refrigeration in the Pacific theater of operations.



Side view, with machine compartment exposed, of the portable ice "fields" made in Hawaii by Von Hamm-Young Co., commercial refrigeration distributor, for use by the Army, Navy, and the Red Cross.

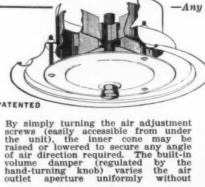


Three models are produced, one with a capacity of 300 pounds of ice hours, another with 500 pounds canacity. pound capacity model.

How to control supply-air diffusion to meet specific job requirements and occupant desires.

Direction and volume of air discharged by every KNO-DRAFT Air diffuser can be adjusted quickly and accurately at any time for system balancing, ceiling heights, seasonal requirements, temperature differentials and the desires of the occupants.

-Any desired condition at your finger tip.



KNO-DRAFT Type K Adjustable Air Diffuser with Type D Volume Damper *

affecting the outlet velocity or diffusion pattern.

Pree Handbook: Contains clear sketches, charts, dimension prints and instructive text that simplifies the selection and installation of air diffusers. Write Dept. A-4.

W. B. CONNOR ENGINEERING CORP. Air Diffusion

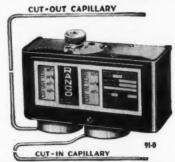
Air Purification Air Recovery

114 E. 32ND STREET



NEW YORK 16, N.Y.

Better Preservation of Perishables-Ranco Type 91-0 With Exclusive Interlocking Two-Temperature Control



Ask your Ranco Jobber about this and other Ranco Controls.

This is the ideal control for walk-in coolers, display cases, florists boxes, etc. Ranco Type 91-0 assures uniform fixture temperature, uniform high relative humidity, and completely automatic defrosting of the coil regardless of weather or load conditions or a cold location of the compressor. For either natural convection or forced convection units. Has independent external adjustments for cut-out and cut-in.

Ranco Inc. COLUMBUS 1, OHIO

5 GOOD REASONS WHY You Should Always Specify

Commercial Refrigeration Applications!



Sportan Manufactures

ntrols • Retrigerant

Distributors and the only

Thermostatic Expansion

Maines Mith Selective

and Remember ... only SPORLAN can give you this PEAK PERFORMANCE

because

Sporlan selective charges C and Z prevent flooding the evaporator at the start of the cycle.

2 Sporlan selective charges C and Z prevent overloading the motor at the start of the cycle.

3 Sporlan selective charges C and Z minimize hunting during the running

4 Sporlan selective charges C and Z close the valve quickly and positively when the compressor stops.

5 With Sporlan selective charges C and Z the control is always in the bulb, no matter how cold the valve diaphragm becomes.

How to Determine Which of the Two Charges to Use is Simplicity Itself

Just remember that the Sporlan C charge is always used on all jobs with suction temperatures ABOVE ZERO. The Sporlan Z charge is always used on all jobs with suction temperatures BELOW ZERO.

SPORLAN C CHARGE

For All Small Commercial Refrigeration **Applications With Suction Temperatures ABOVE ZERO**

DISPLAY CASES WALK-IN COOLERS REACH-IN BOXES WATER COOLERS BEVERAGE COOLERS FLORIST BOXES

For All Small Commerical Refrigeration Applications With Suction Temperatures BELOW ZERO

ICE CREAM CABINETS HOME FREEZERS LOCKER PLANTS

Other Sporlan Selective Charges are the Type G for all Comfort Cooling Installations and the Type X for all applications below-30° F.

SPORLAN VALVE COMPANY

SPORLAN VALVES With Selective Charges "C" and "Z" on All Small

SPORLAN Z CHARGE

FARM FREEZERS

3723 COMMONWEALTH AVENUE, ST. LOUIS 17, MISSOURI

16 Training Films for Refrigeration Repairmen Now Available for Distribution to Industry

Industry Group Aided Govt. In Production

litioning ompany

nder the ng, parindquist

in the demand

eceive

many

ration

on

ires

r tip.

stable

olume

diffu-

HOLLYWOOD, Calif.-Sixteen refrigeration films which were produced here by the U.S. Office of Education to assist in training refrigeration repairmen are now ready for distribution, announce officials of the Federal agency.

Available on 16 mm. prints, the films cover general principles of refrigeration, household servicing, and commercial servicing. Refrigeration men served as consultants in arranging the subjects.

The films may be obtained through visual educational dealers throughout the country or directly from Castle Films, Inc., 30 Rockefeller Plaza, New York 20, N. Y. Prices vary according to length.

Instructor's manuals accompany each film, and available for \$1 each are film strips intended for review purposes. Titles and numbers of the films are as follows:

360-"Principles of Refrigeration."

HOUSEHOLD

438-"Checking the System. Part I: General Procedure. 439-"Checking the System. Part

II: Trouble Shooting." 440-"Locating and Repairing

441-"Adding or Removing Refrig-

442-"Removing and Installing a Compressor or Condenser."

443-"Removing and Installing a Cooling Unit." 444—"Adjusting and Checking the

Expansion Valve. 445-"Checking and Replacing the

Float Valve.' 446-"Checking the Electrical System.

447-"Quieting a Noisy Refrigera-

COMMERCIAL

448—"Adjusting and Repairing the Thermo-Expansion Valve.'

449 — "Adjusting Pressure-Actuated Temperature Control Devices." 450-"Adjusting Commercial Thermostatic Controls.

451-"Servicing Water-Cooled Condensers."

452-"Making and Repairing Tubing Connections.'

The first film on refrigeration principles was produced by Graphic Films of Hollywood; those on household servicing by the Frederick K. Rocket Co. of Hollywood; those on commercial servicing by Anson Bond Productions of Los Angeles.

Members of the advisory committee which supervised production of the films included Dr. R. L. Dougherty of the California Institute of Technology; Dr. David Jackey of the California State Department of Education; Charles L. Walling, secre-



Representative of the group active in producing the training films on refrigeration are (left to right) Dr. David P. Jackey of the California State Department of Education; Noel Leigh-Taylor, film writer; Marion Grosse, U. S. Office of Education; Harry L. Bowe, shop foreman of Arden Farms Refrigeration Shop; Franklin B. Judson, U. S. Office of Education; Jesse C. Blair (front), instructor; Charles L. Walling (rear), secretary of the Refrigeration Contractors Association of Los Angeles; Harold A. Halls, manager of Refrigeration Service, Inc.; Les Novros, film producer; Frederick K. Rocket, producer; Thomas F. Carter, chief engineer of Baker Ice Machine Co. in Los Angeles.

tary of the Refrigeration Contractors Association of Los Angeles; Jesse C. Blair, teacher of refrigeration and air conditioning at the Frank Wiggins Trade School, Los Angeles.

Thomas F. Carter, chief engineer of Baker Ice Machine Co., Los Angeles; Harold A. Halls, teacher and manager of Refrigeration Service, Inc., Los Angeles; and Harry L. Bowe, foreman of Arden Farms Refrigeration Shop, Los Angeles, who also appeared in the films as

First public showing of the new films was held in Los Angeles recently before an audience of some 400 refrigeration contractors, engineers, jobbers, instructors, and mechanics at a meeting sponsored by the Refrigeration Contractors Association of Los Angeles.

Mr. Walling, secretary of the association, sketched the history of the training film program, stating that it began early in 1944 when the War Manpower Commission placed refrigeration repairmen on the "critical" list of workers vital to the war

The United States Office of Education, which has supervised the making of 500 training films during the war, laid out a program of 16 films on refrigeration, and the advisory committee from the refrigeration industry helped in a further breakdown

on the subjects, said Mr. Walling. Cautioning that a training film is ot a "quickie" learning device, not a Marion Grosse, technical consultant with the U.S. Office of Educatoin and a veteran teacher, emphasized

that these films are only an aid to the teacher and are not intended

to supplant the instructor.

Headquarters

REFRIGERATOR HARDWARE for domestic, commercial and low temperature cabinets

Standard and custom built designs. If you are a manufacturer or jobber, write for our new Refrigerator Hardware Catalog No. R-88.



NOT AFFECTED BY * ATMOSPHERIC PRESSURE

In the stratosphere or at sea level, in a mile-high airplane or on a tropical isle, White-Rodgers Hydraulic-Action controls never need adjustment or recalibration.

The completely sealed solid-liquid charge of the Hydraulic-Action element is tested before it leaves our plant, and will perform as calibrated no

matter where you install it.



8 EXCLUSIVE FEATURES OF WHITE-RODGERS HYDRAULIC-ACTION **TEMPERATURE CONTROLS**

1. May be mounted at any angle or position, above, below or on level with

2. Hydraulic-Action principle incorcapillary provides expansion force comparable to that of a metal bar.

3. Diaphragm motion uniform per degree of temperature change.

4. Power of solid-liquid charge permits unusually sturdy switch construction resulting in positive contact closure.

5. Heavier, longer-wearing parts are possible because of unlimited power.

6. Dials are evenly and accurately calibrated over their entire range because of straight-line

7. Controls with remote bulb and capillary are not sensitive to change in room temperature. Accuracy of control is not affected by temperature changes in surrounding area.

* 8. Not affected by atmospheric pressure. Works accurately at sea level or in the stratosphere without compensation or adjustment.



CONTRACTED

Above is a cross section of the diaphragm and part of the liquid-filled capillary. In this view the liquid has contracted, releasing the pressure on the diaphragm and causing the switch contacts to function.

===

In this cross-sectional view, the liquid charge of the capillary has expanded with a rise in temper-ature. The positive force of this hydraulic action forces the diaphragm outward and causes the switch

Actual-size illustration of the White-Rodger

Not having to worry about adjustments - fewer service calls - are advantages White-Rodgers Hydraulic-Action controls can give you. How this is done is shown in the illustrations below.



diaphragm body, the actuating element of every White-Rodgers temperature control. It is so designed as to exert <u>full</u> pressure at the





needs and pocketbooks of ALL USERS. GET FACTS on AMANA. It's a good name to be associated with. Write or wire.

Refrigeration Division AMANA SOCIETY AMANA, IOWA

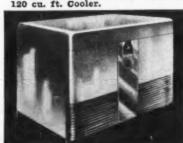


5 CU. FT. CABINET. Accessible . . convenient . . counter - balanced lid. No waste space.

Model 90 9 CU. PT. CABINET. Full view counterbalanced top. Contents easily accessible. 100% usability of storage space.



Model 200 Freezer - Cooler A complete private Locker Plant. 23 cu. ft. sharp freezing capacity. 120 cu. ft. Cooler.



Inside Dope

By George F. Taubeneck

(Concluded from Page 1, Column 1) hands of a genius, the late F. M. Cockrell-to combine efficiency with atmosphere, luxury and comfort with ingenious application of scientific office management theories.

Everybody who visited our place raved about it.

Perhaps no place we shall ever ir nabit will be so conducive to creatwe effort—and certainly no place we can possibly find now. (You should see some of the rattletrap rookeries we've been shown these last

If all this leads you to believe that we're bitter about being forced to move, you're right.

And if, on your next visit, you find us in a location which does not seem to represent the ideals which AIR CONDITIONING & REFRIGERATION NEWS as a publication has always striven toward, please don't blame

If Government wants to do something to you, friends, all you can do is grin and bear it.

That Famous Picture

Spear-headed by the memory of Marine Franklin R. Sousley who helped raise the American Flag on Mt. Suribachi during that historic moment on Iwo Jima, and later lost his life on the same island, former Frigidaire employes who have been killed in defense of their country are silent but eloquent salesmen in the current Seventh War Loan Drive being conducted at the Frigidaire Div.,

General Motors Corp., in Dayton. All of Frigidaire's employes are dedicating their purchase of War Bonds to the memory of Franklin Sousley and other members of their

organization who have met death on the field of battle in this war.

Photographer Rosenthal's historic picture of the flag raising on Iwo Jima, which shows Marine Sousley assisting in the raising of Old Glory, inspired the dedication.

Franklin B. Sousley did not work at Frigidaire very long; just a youngster, he had only been employed there a little over a year when he was granted military leave in May, 1944, to enlist in the Marine Corps.

A Kentuckian, he was only 20 years of age when he met his death. Private Sousley's mother, Mrs. J. H. Price lives at Ewing, Ky.

Arch Black Hears From Friends

Business men from liberated countries are looking forward with keen anticipation to resumption of trade with American companies, it is disclosed in communications received from abroad by the export department of the Norge division of Borg-Warner Corp.

This holds true also for business leaders in countries other than those which were under the Axis yoke, according to Arch Black, Norge's export manager (and, incidentally, one of "Inside Dope's" favorite people).

Letters to Arch reveal also the sense of relief experienced by these business men at having been liber-

Of special interest to many subscribers will be the wire sent by Arch's Manila distributor shortly after the last Jap was cleaned out of that city. Transmitted on March 26, it reads as follows:

"Happy to report having survived and free again. All stocks burned. Hope business activity recovers soon. Best wishes. William Parsons."

Similar appreciation for deliverance and hope for a return to trade with the United States is reflected in a postcard from Norge's Belgian distributor. E. J. Van de Ven of Brussels, Belgium, who wrote in Decem-

"We are still in good shape but anxious to see the end of the war. It has been long and miserable but we have come out of it now as well as could be hoped. We are entirely out of stock and are looking forward to seeing Norge products again."

This was the first word Arch had received from Van de Ven since 1940. During the Nazi invasion of Holland Mr. Van de Ven fled to the south of France-completely destitute, despite the fact he had been one of the continent's leading merchants.

Mr. Black considers it to be a major mystery as to the manner by which Norge's Norwegian distributor contrived to pay off a debt of several thousand dollars in the course of three years, even though the Ger. mans were in full occupation of his country during the period in which he cleared his obligation.

Norge wrote off that debt when his country was invaded; but soon paid drafts began to arrive through unknown foreign banking sources.

Not only was the original amount provided for, but interest as well. The company refused to accept the interest, but credited it to his ac-

Correspondence is now being re. ceived fairly regularly from the company's Paris distributor, A. S. Colin, of Ste. Frimotor Norge, who appears particularly anxious to resume trade with the company.

He first cabled, Nov. 15, 1944: Best wishes for mutual prosperity. Hoping selling many Norge again soon." On Jan. 4, he sent an order for 110 refrigerators plus what is described as a "very large" quantity of repair parts.

Communications have been re opened with the Finnish distributor, who has asked for catalogues and other technical material and has written, "It will naturally still take some time before we can again start our pleasant business relations and perhaps, before that, a member of our firm will try to come over and see you."

Fairly close contact also has been re-established or has been maintained with distributors in the Middle East and other countries

REFRIGERATION ACCESSORIES

47 PIQUETTE AVENUE DETROIT 2, MICHIGAN

WAR INDUSTRIES NEED REFRIGERATION The use of refrigeration in industry has been greatly accelerated by the war. In peacetime this expansion may logically be expected to continue. Write for literature. GENERAL REFRIGERATION DIVISION





Self-Service retailing of meats and delicatessen items is a sound and proven merchandising method. Consumers like the idea because it saves time, offers a wider choice of varieties, ready-packed and ready-priced. Operators like the idea because it saves labor, provides faster turnover, larger sales, less spoilage.

Another instance where the dependability and pioneering of Kerotest advanced-engineering in the Air Conditioning and Refrigeration industry will play an important role.



KEROTE51

KEROTEST MANUFACTURING COMPANY

Pittsburgh, Pennsylvania

ORIGINATORS OF THE PACKLESS DIAPHRAGM VALVE



Jointless Type

ROME-CONDENSER

Rome Water Cooled Condenser Coils insure trouble-free condensing equipment. Used by lead. ing compressor manufacturers.

ROME-TURNEY

222 CANAL ST. ROME, N. Y.

Predictions in the News



Arch had ince 1940. Holland, south of e, despite

to be a anner by istributor of several ourse of the Geron of his in which when his oon paid ough unirces. amount as well. cept the his aceing rethe com-S. Colin, appears me trade

5, 1944; osperity.

e again an order what is

quantity een retributor, ues and and has till take ain start ons and

mber of over and as been intained dle East

ORIES

Tanks.
d Tem
Photo

efrigerat

CTS

ES ION

peace-be ex-rature. ISION

SER

denser ndens-

leaders.

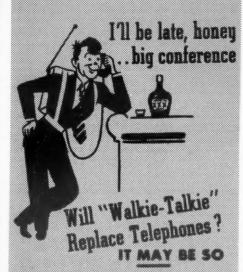
EY

ANY

Wear clothes that never lose their press? IT MAY BE SO



Will snow, bugs and dust be deflected from windshields of postwar autos? IT MAY BE SO

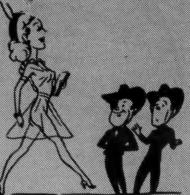




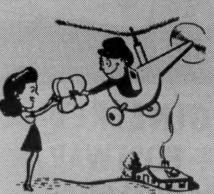
Super-Concentrated Foods?



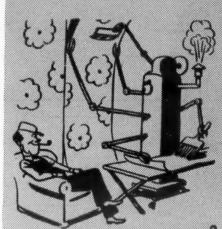
IT MAY BE SO ...



Future Clothes Made of Glass? IT MAY BE 50



Department Store Deliveries by Helicopter? IT MAY BE SO



A Paper-Hanging Machine? IT MAY BE 50

FOU'LL HAVE A GREAT FUTURE

A BORG-WARNER INDUSTRY

SEE NORGE BEFORE YOU BUY



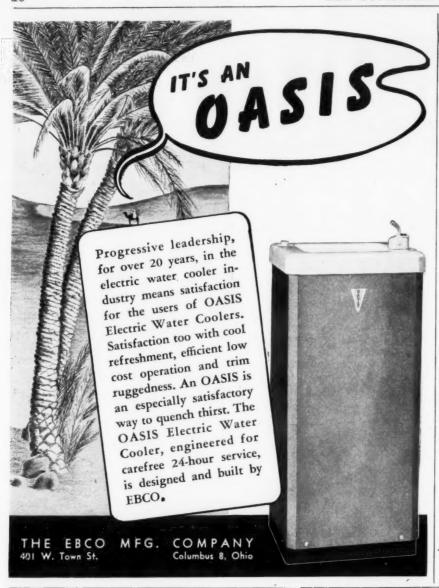








NORGE DIVISION BORG-WARNER CORP. ADDISON INDUSTRIES, LTD. TORONTO, ONTARIO



ENGINEERED

FOR POSTWAR

Locker Men Confer With OPA, **Draw Up New Declaration Form**

CHICAGO-To cooperate with the OPA metropolitan office here in eliminating the meat black market, a six-man advisory committee was chosen recently from 22 locker plant operators who met with Marion W. Isbell, OPA area director.

Chairman of the committee is Lew C. Mills, Libertyville, Ill., a director of the Illinois Frozen Food Locker Association. Other members include George A. Smith of Hammond, Ind., M. J. Muller of Downers Grove, Ill., Kenneth Ochsenchlager of Aurora, Ill., J. B. Kennedy of Des Plaines, Ill., and Jess N. Cole.

The meeting of operators and OPA officials resulted in the introduction of a questionnaire for locker plant customers and the authorization of a poster declaration of the operators' support of OPA regulations.

Operators were informed by Homer Clay, chief enforcement officer, that no blanket investigation of locker plants is intended, but OPA plans a thorough examination of plants suspected of renting lockers to customers for use in holding black market meat.

Because OPA is chiefly interested in keeping meat in trade channels, according to Mr. Clay, he advised operators to persuade their customers who have "point-less" to sell to a butcher or to friends with ration points.

"On no account let anxious patrons remove meat from lockers, only to have it spoil, or end up in the river," he said.

The form for locker plant cus-

tomers to sign when they bring meat into the plant follows: Customer's Name (Print)..... Address Description of Meat

I. Are you a resident farmer? If so, fill in the following:

A. On the premises operated by me I have raised the livestock described above:

(Check one)

) from birth to the moment of slaughter, or) for at least 60 days imme-

diately preceding slaughter, or) for a period immediately preceding slaughter during which its weight was increased by at least 35% of its weight when acquired.

B. (Check one) I

) actually supervised the raising of such livestock and was on the premises on which that livestock was raised at least one third of the days during the applicable period specified above, or

() operate a farm on which I reside more than six months of the years.

II. If you are not a farmer, please answer the following:

A. I obtained the meat described above from (address) B. I delivered to the person from

whom the meat was obtained number of ration points.

Signature of Customer

Frozen Food Foundation Names Staff and Gives Outline of Its Plans

SYRACUSE, N. Y .- Frozen Food Foundation, Inc. has taken a lease on the Cahill building at 600 West Genessee St., Syracuse, it has just been announced.

This modern, one-story building will be used jointly by Frozen Food Foundation, Inc., Frozen Food Products, Inc., and affiliated activities.

The Frozen Food Foundation, Inc. is a technical research organization recently formed under the sponsorship of some of the country's leading department stores. These stores include R. H. Macy & Co. in New York; Day Brothers, Syracuse; Marshall Field & Co., Chicago; J. L. Hudson Co., Detroit; and a number of others.

These sponsoring stores have formed no definite plans as to whether they will or will not be interested in retailing frozen foods, it was stated, but since they are all large users of frozen foods in their own restaurants and cafeterias, they will have a great interest in the foods - particularly frozen cooked

The technical staff is expected to

work primarily in testing froze cooked products, testing consu reaction to certain types of froze foods, and working on the develop ment of quality control standard Carrier Corp., manufacturer of frigeration equipment, will assist problems having to do with refrig eration equipment.

Decid

esumpti

onsidere

arnings

Mr. F

lirector

president

tho alse

SAN F

ontracto

e follo

H.

Turner,

reasurer

FILTRI

For Ove

refrige

much

ductio

belts

equip

long-

deale

bour

busi char

It is planned to equip the Founda tion's headquarters with test kitchen chemical laboratory, bacteriolog laboratory, packaging and testin he issu laboratory, and a library. Since with re considerable experimental work of rector frozen foods will be carried on former other parts of the country, an extensive program of correlation of the Frank ow cha program being carried on at unive ounced sities and related testing laboratorie losed th is being planned. cquired

The staff at the Foundation will headed by Dr. Gerald A. Fitzgeral Mr. Fitzgerald w as Director. graduated from the Massachuset Institute of Technology in Industri Biology in 1923. After spending for years in government research d He had veloping improved methods of har dling fish, he joined Clarence Birdse at Gloucester, Mass., early in 1928. buigan,

Upon the enlargement of Birdseye research activities, und Dr. D. K. Tressler in 1930, he had dled the frozen fruits development **Vew** and later vegetables.

He succeeded Dr. Tressler as chi forme chemist in 1934, and added the ti of Director of Quality Control f the production activities of Froste Foods Sales Corp. in 1936, a nd Oak Director of Research, Birdseye Lab anized t ratories, in 1938. In 1941 he becam ssociati Technical Director, Richardson t a mee Robbins Co., Dover, Del., where remained until accepting his prese harles 1 position. hirar, N

Dr. Donald K. Tressler, who Ed Kran be consulting food technologist f Scott, We the Foundation, received his Ph. After degree in chemistry from Corn university.

From 1933 to 1943 he was head the Chemistry Division of the N York State Agricultural Experime Station, and professor of Agric tural and Food Chemistry at Com university. He was then director the General Electric Consum Institute, and has also acted as o sultant on food technology for number of companies.

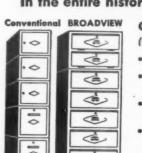
Dr. Jean I. Simpson, chemist charge of Cookery Investigations the Foundation, received her M and Ph.D from the University Chicago. She has been instructor Foods and Nutrition, Cornell univ sity; on the editorial staff of Cur Publishing Co.; assistant professor Household Science, University Toronto; and since 1941, profess of Home Economics and Associa Chief in the Experiment Stati University of Illinois.

Dr. Jennie McIntosh, who will a be on the Foundation staff, has Ph.D. from Cornell university, Director of Foods and Nutrition search at Washington State Expe ment Station and College, 1940-19 and since 1943 has been a nutrition for General Electric Consu

Institute.



Sare-Way's Sensational WIDE-DESIGN LOCKER "Acclaimed the greatest single advancement in the entire history of the locker industry."



175 W. Jackson Blvd.

Compare the BROADVIEW (Completely assembled 5 drawer, 2 Door Tier)

- Years ahead—in beauty, utility, construction!
- Exclusive Wide Design increases yearly rental 50% per tier.
- Greater Capacity—with contents entirely
- · Completely assembled -- no high costs for
- assembly. · Priced the same as other conventional models.

Chicago 4, Illinois

See the wonderful new BROADVIEW Locker on Display at your dealer's today. Plan now to offer your patrons its many extra advantages. With the BROADVIEW wide-design Locker in your plant you are assured of the *preferred* business in your community.

FOR IMMEDIATE SHIPMENT ...

Write Us Today for Name of Your Nearest Dealer!



UNIVERSAL COOLER CORPORATION . automatic Refrigeration since 1922 MARION, OHIO . BRANTFORD, ONTARIO

ing frozeNew Management of froze he develop Declares Dividend standard Il assist on Fedders Stock

irer of r

vith refrig

ce Birdsey

in 1928.

t of

ed the ti Control

of Frost

1936, a

lseye Lab

he becan

hardson

where |

his prese

his Ph.

m Corn

as head

f the N

Experime f Agric

at Com director Consum ted as co ogy for

chemist

gations

her 1

iversity

structo

nell univ f of Cu

rofesso

versity

profes

Associ

t Stati

o will a aff, has ersity, itrition te Exp 1940-19 nutritio Consur

BUFFALO-Directors of the Fedhe Found jers Mfg. Co. have declared a quar-st kitchen erly dividend of 37½ cents on the erly dividend of 371/2 cents on the struction erly dividend of 37½ cents on the pacteriolog spital stock, the first payment on and testin he issue since 1942, and accepted try. Sind with regret" the resignation as a l work a firector of Theodore C. Fedders, ried on i former president.

7, an exter Frank J. Quigan of Maspeth, L. I., tion of the council of

at univer nounced early in April when he dislosed that Long Island interests had tion will besimption of divides the sumption of dividends was being Fitzgeral considered because of improved arnings.

gerald war all ssachusett in Industrial ending for Mr. Fedders resignation had not een expected, company sources said. ending for He had agreed to continue as a search director when he was replaced as ds of har resident by Salvatore Giordano, who also is president of Frank J. Quigan, Inc., Maspeth manufacturer.

ties, und 30, he has New Contractors Group ter as chi formed In California

SAN FRANCISCO - Refrigeration contractors from the San Francisco and Oakland East Bay region orranized the Refrigeration Contractors Association of Northern California at a meeting held May 31.

The members of the association, Charles H. Merrill, J. Chapman, Lee , who w Shirar, Nat Silverstone, A. K. Turner, ologist f Ed Krantz, L. E. Kreps, and W. A. ologist f Scott, were also appointed directors. After the organizational meeting, he following officers were elected: C. H. Merrill, president; A. K. Turner, vice president; W. A. Scott, reasurer; and L. E. Kreps, secretary.

> WATER COOLERS For MESS HALLS . HOSPITALS . PLANTS

PACKAGED Remote and Cabinet Models Capacity 88 gals. in 2 hour period For all applications Quick Shipments Write for Details

FILTRINE MANUFACTURING CO. Brooklyn 5, N.Y.





Air conditioning and refrigeration are essential to much of America's war production. That means that the belts so important to such equipment must be rugged, long-lived, and efficient.

Gilmer Belts are real sales getters in this field, and dealers who stock them are bound to do a tidy service business. Don't miss this chance while it's really hot. Get hold of your Gilmer jobber today.

L. H. GILMER COMPANY

Weir Refrigeration **Opens Fresno Store**

FRESNO, Calif.—Weir Refrigera-tion Service Co. of Vallejo, Calif., have opened a new sales and service unit here managed by W. G. Abbott.

Featuring a large salesroom at 2501 Tulare Ave., the new shop is displaying several types of walk-in, reach-in, and backbar refrigerated

Home freezers will be an important part of the next year's work, according to the Weir office, presently taking orders from ranchers and fruit growers only in the Fresno area. Mr. Abbott was recently discharged from the Army following service with a Military Police outfit and has 17 year's experience with commercial refrigeration.

U.S. Thermo Plans Units For Airplanes

MINNEAPOLIS — According to A. Numero, president of the U. S. Thermo Control Co., Minneapolis, the postwar field for the company's self-contained, gas-driven refrigeration units will be extended to include railroad and air transportation, as well as truck transport.

The one-piece mechanical refrigeration unit, which is powered by an air-cooled gasoline engine, is completely automatic and thermostatically controlled, Mr. Numero explained, and because of its construction permits greater payload footage within the refrigerated fixture.

The unit features an outside mount

forward position which eliminates much of the dirt accumulation experienced with under-mount installations, it was stated.

Another feature is the startergenerator in one unit which is mounted directly on the crank-shaft instead of the flywheel. This mechanism operates by converting to charge the battery of the system after reaching starting speed, and is adaptable to any automotive engine, Mr. Numero pointed out.

The company, which operates five plants in the Minneapolis area, has been in 100% war production, manufacturing light self-contained refrigeration units for the armed services.

Among special construction jobs, the company produced a 50 cubic foot portable and airborne aluminum box which, complete with the refrigeration unit, weighed 800 pounds. The entire unit can be broken down

or set up in approximately 12 minutes, it was stated.

Also developed for the armed forces by Frederick Jones, chief engineer of the company, is the motor unit which powers a lightweight, portable ice cream making machine which is capable of producing 40 gallons of ice cream a day, Mr. Numero said.

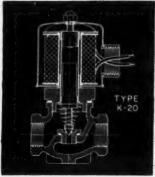
Working with the company on special equipment for the services is Capt. George D. Wetherbee, who is in charge of Development and Planning, Refrigeration Section of the Quartermaster General's office in Washington. Formerly with the Commonwealth Edison Co. in Chicago as refrigeration engineer, Capt. Wetherbee is now responsible for the development and allocation of all mobile and portable refrigeration units used by the Army throughout the world.

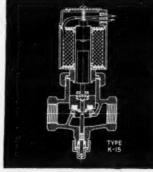


WEBER SHOWCASE & FIXTURE CO., INC., 5700 AVAION BLVD., LOS ANGELES 54, CALIF.

Single Seated Electro-Magnetic Valves

FOR CONTROLLING REFRIGERANTS, AIR, WATER, GAS, LIGHT OIL





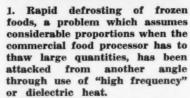
General Controls offers a series of efficient electro-magnetic valves for air conditioning service. 2-wire, current failure. Packless construction. No A.C. hum. All internal parts are bronze or stainless steel. Coils are removable while valve is under pressure. We also offer an unsurpassed Thermal Expansion Valve—Type V-200, with extreme sensitivity. Valves handle freon, methyl chloride and sulphur dioxide. Details upon request. Ask for Bulletin No. 200.



FACTORY BRANCHES: Philadelphia, Atlanta, Boston, Chicago, Dallas, Kansas City, New York, Denver, Detroit, Cleveland, Pittsburgh, Houston, Seattle, San Francisco, Distributors in Principal Cities.

Electronic Heating Permits Defrosting of Frozen Foods In Few Seconds; Predict Widespread Use in Bakeries

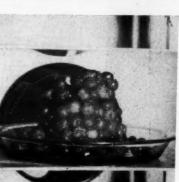




The housewife who uses frozen foods may also benefit from this development of the Federal Telephone & Radio Corp. It is possible that a small, plug-in electronic over may be brought out. Above, Mary Barry, of A & P Food Stores, places frozen cherries in a test oven.



2. In only six seconds the cherries have already started to thaw.





3. Close-up after six seconds.



Completely defrosted now, the cherries were in 11 seconds.



5. Three pounds of peaches are placed in the special oven.



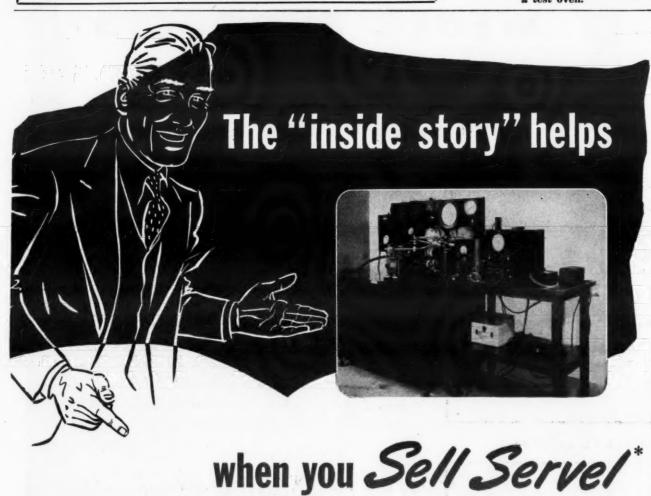
6. The peaches are between electrodes powered with vacuum tubes.

8. After nine seconds the peaches are almost completely defrosted.



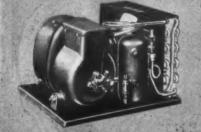
9. Dr. William Cathcart, head of A & P national bakery laboratories, samples the defrosted sliced peaches 11 seconds after the test was started. He predicts a great saving in time and other improve ments in operations with this method of defrosting.

Dr. Cathcart envisions bakeries having dielectric ovens with conveyor belts carrying frozen food through them.



"Servel's new "Supermetic" condensing units will serve ers and fixtur turers in every vital field

- 1. STORE FIXTURES
- 2. MILK COOLERS 3. HOME LOCKERS
- 4. BEVERAGE COOLERS
- S. VENDING MACHINES
- 6. ROOM COOLERS .
- 7. FARM FREEZERS
- 8. WATER COOLERS
- 9. INDUSTRIAL COOLING 10. VEHICLE REFRIGERATION



One of the reasons why you can offer your customers better, more efficient service with Servel condensing units is pictured above.

The complicated looking machine is a specially designed cathode ray cillograph. It tells Servel engineers exactly what goes on inside the compressor cylinder. With it they check exactly on the pressure in the cylinder at every piston position. They make sure that valves open and close promptly without flutter, and that they offer a minimum of resistance to the flow of gas in and out of the cylinder.

This test also shows the amount and effect of re-expansion if a model has excessive clearance volume.

In addition to getting the "inside story" on compressor cylinders, Servel engineers subject their designs to many other equally exhaustive, equally revealing tests. This insistence upon the highest engineering standards accounts for Servel's twenty-year record of successful installations. It explains Servel's fine reputation for dependable, trouble-

When you sell Servel condensing units, you can be confident not only that they'll find ready acceptance, but that they'll continue to merit that acceptance by delivering durable, economical, dependable service.

FREE: For advance information about Servel's post-war line of condensing units, write for the new folder, "Servel Supermetic." Address Servel, Inc., Dept. RN, Evansville 20, Indiana.



SERVEL, Inc. Electric Refrigeration Division, Evansville 20, Indiana





Now it can be shown. And the big news is that the new Westinghouse is an upright Home Freezer.

ead of

labora

sliced

he test

great

proveh this

akeries h conn food

gie... he nd xHome Freezer.

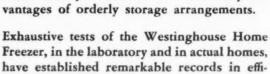
The Westinghouse Home Freezer can be located wherever it is most convenient,

because it requires no more floor space than

a comparable size refrigerator.



"Reach-in Convenience" makes all frozen foods readily accessible with the many advantages of orderly storage arrangements.





Individual inner doors enable the homemaker to select foods from any section without disturbing foods or temperatures in other sections.



Use of the Westinghouse hermetically-sealed refrigeration system assures years of trouble-free operation.

ASK YOUR WESTINGHOUSE DISTRIBUTOR ABOUT THE FULL LINE FRANCHISE

ciency and economy.

This new *upright* Home Freezer with "Reach-in Convenience" is destined to meet consumer preferences. It is destined to be a fast seller. It is just one more reason why the Westinghouse Full Line Franchise will be "hot". A few territories are still open. Check your Westinghouse Appliance Distributor.

WESTINGHOUSE ELECTRIC CORPORATION · Plants in 25 Cities . . . Offices Everywhere · APPLIANCE DIVISION · MANSFIELD, OHIO

Westinghouse

YOUR PROMISE OF STILL FINER ONES TO COME

Tune in John Charles Thomas, Sunday 2:30 EWT., N.B.C. · Hear Ted Malone, Monday through Friday, 11:45 A.M. EWT., Blue Network



Will Salesmen Who Held High-Paying War Jobs Return? On What Terms?

WASHINGTON, D. C.—Three out of every four former salesmen now working in war plants desire to return to sales work postwar, reported Gerald Stedman, marketing consultant, in an address recently delivered before the Electric Institute of Washington.

Mr. Stedman interviewed 601 men while conducting a survey in 18 war plants, 13 of which are in the Middle West and five of which are on the West Coast. The object of the survey was to ascertain the thinking of these former salesmen now employed in war plants on selling as a profession.

The men interviewed were not just appliance salesmen, said the speaker, but had sold durable goods requiring specialized knowledge and they are now doing almost every conceivable war plant job from tool crib clerks to foremen and supervisors.

WHAT THEY WILL SELL

Of those planning on returning to the selling profession about one-third contemplate selling the same line or type of product they sold before the

The motives prompting their desires to return to selling, according to Mr. Stedman, were varied.

The leading motive expressed by 77% of those returning was the greater chance to earn, closely followed by 76% who said selling afforded a greater chance for talent

growth, and 73% who desired to be free of any sort of collectivism. Less than 25% gave as their reason, a desire to influence higher living standards, but 40% preferred selling because of outdoor health and initiative benefits.

Mr. Stedman devoted the most of his comments to the subject of compensation, which as indicated is of great importance to both employe and employer. Back of most every human action, said he, is the question. "What is there in it for me."

COMPENSATION MAIN FACTOR

Consciously or otherwise, said Mr. Stedman, this question of compensation is with us every waking hour. There are, of course, said he, many forms of compensation, such as power, social position, living convenience, and a chance to indulge those we love. All of us want a minimum of shelter, clothing, and food to sustain life cheerfully, and money-not for itself but for its ability to be transformed into a variety of compensations suited to the individual.

Every man, said the speaker, loves work—as distinguished from labor-knowing it to be the order of life and the sure way to win the variety of compensations which will give him a richer life. There is something of this thought back of the reasoning of those desiring to leave war work and return to selling. To a certain extent, they view their shop experiences as labor, do not like it, and are anxious to sell because they consider it work of greater utility, uniqueness, efficiency,

The appliance salesman, said Mr. Stedman, is the great educator of the better, richer life. By serving well, he profits well, and becomes the Kingpin of our economic system.

COMMISSION OR SALARY?

Surveying the desires of those favored interviewed as to the methods of compensation, Mr. Stedman found that a large majority, 65%, preferred salary and commission, 11% desired straight commis-10% liked straight salary, while the balance preferred drawing accounts with and without commis-

Commenting on the qualifications and equipment necessary for a successful appliance salesman, the speaker emphasized the importance of the salesman possessing and enjoying the benefits of the enriched home life he is trying to sell the prospect. In other words, if he is trying to sell a refrigerator, he would be very embarrassed, if, when the prospect asked him if he owned one, he could not answer in the affirmative.

Also, the salesman cannot expect to take his lunch to work in a pail. His stock in trade is meeting people

which involves a certain amount of entertaining, attendance at luncheon clubs, and dining out. He must be alert to current affairs which makes it essential that he read, listen to the radio, attend lectures, contribute to the church, and other philanthropies. Such activities are expected of him because he is in the public eye, and to the extent he keeps himself that way, will be, to a certain degree, one of the measures

Mr. Stedman expressed surprise that 72% of the 478 former salesmen interviewed on the weekly sales volume expected on which to base their compensation, felt \$450 to be a rational aspiration. These were not all appliance salesmen, many intending to sell a variety of durable goods, but the rather high figure was well matched by the appliance salesmen answering, and seemed to reflect their optimism.

The significant findings of the survey in regard to methods of compensation, said the speaker, are shown in the opinions of 417 former salesmen and is based on the assumption that a salary will be paid to cover their minimum existence, leaving a latitude of commission incentive to increase their earnings.

Assuming a weekly sales figure of \$450, these men were asked to indicate their preference as to fixed salaries and percentage commissions, with the following results:

Plan

1. \$35 per week and 5% commission
2. \$30 per week and 8% commission
3. \$25 per week and 10% commission

These results, argued Mr. Stedman, are encouraging in that they show the fairness of the salesmen in their

belief that the matter of compensa tion is a dual responsibility of the employer and the employe. The expect the employer to provide fo minimum subsistence which is pre sumed to come within the \$25 to \$30 a week bracket.

WHAT THEY GOT IN WARTIME

It is interesting to note the factor pay now being received by thes men, as indicated by a limited bu significant number who took Mr Stedman into their confidence. Thi compensation averages per week for supervisors, \$76.15; for machine operators, \$68.40; for non-productive labor, \$63.50.

These former salesmen apparently have the courage of their convictions said the speaker, as they are al willing to leave a sure pay envelope to accept a subsistence wage lower than unskilled labor commands and trust to their own abilities to earn the remainder they need. What they want is \$75 per week. They set their goal of sales at \$450 per week and select the lowest risk in salary investment for the employer, in order to win their desired income. This looks like a fair deal all around.

In closing, Mr. Stedman discussed at some length the reason a large number of the men gave for a return to selling, namely "freedom from being collectivised or cow-belled. Can we expect a trend toward

	- 4	
No. of Salesmen	%	Income on \$450 weekly sales
92	22	\$57.50
147	35	66.00
178	43	70.00

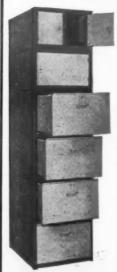
organized trades unionism? the philosophy of collective bargain ing apply to the occupation of selling? Can you regiment the selling profession?

The majority of these forme salesmen agree with him, said the speaker, that collectivism has no part in the structure of the sales profession. However, he continued opinions will not solve the problem only the attitudes of the manufacturer, distributor, factory worker and the public can do that. If these attitudes do not change, unionism will be attempted.





THE LOCKER LINE THAT SELLS



New and added profits are provided for you with A.S.I Froz.n.Food Lockers. Food Lockers. Food Lockers. Food Lockers and the feeting lide - easy drawer action, smooth two-tone finish, factory assembly, steel construction—these and other features make A.S.I Froz.n.Food Lockers easy well.

You car

output

is a tre

machin

in an e

income record.

The Ch all or t

manufo buying buyer's advert

through

A-S-E is America's preferred locker. The locker for extra profits, complete customer satisfaction. Write today for more information.

ALL-STEEL-EQUIP COMPANY, INC AURORA, ILI 450 GRIFFITH AVE.

Hotpoint ... A Proud Past –

"One of a Series Interpreting Hotpoint's Promise to the Public: Dependability Assured by 40 Years Experience."

A Splendid Present—A Tremendous Future

TOTPOINT as a trade name came H into being early in the present century. To three generations it has meant relief from burdensome tasks in the American home. Constant research and experiment by a competent staff of engineers and technicians have widened the family of Hotpoint appliances while steadily improving their design.

• Today Hotpoint is a great name in the appliance business because: (1.) Hotpoint was first to use national advertising and has been a consistent advertiser ever since. (2.) Practically half of all consumer advertising published by all electric range manufacturers has been printed over the Hotpoint name. (3.) More than one-third of the electric ranges in use today were made by Hotpoint. (4.) Almost one-half of all electric water heaters in use today were made by Hotpoint.

(5.) Hotpoint was the first to promote the complete all-electric kitchen.

• • That Hotpoint's name will soar to new peaks of greatness tomorrow is assured by (1.) Hotpoint's retail minded executive staff composed of men who have grown up with the electric appliance industry. (2.) Hotpoint's salesminded engineers and technical staff. (3.) Hotpoint's factories are unsurpassed in equipment and productive facilities. (4.) A greater than ever Hotpoint sales and advertising program for V-days.

 Forty years of housekeeping experience in millions of American homes make Hotpoint the thoughtful homemaker's choice.

Edison General Electric Appliance Co., Inc., 5632 W. Taylor St., Chicago 44, Ill.



Use this PLUS VALUE

ty of t

took M

discus

said th has n

proble

d addedare profor you

A - S - E

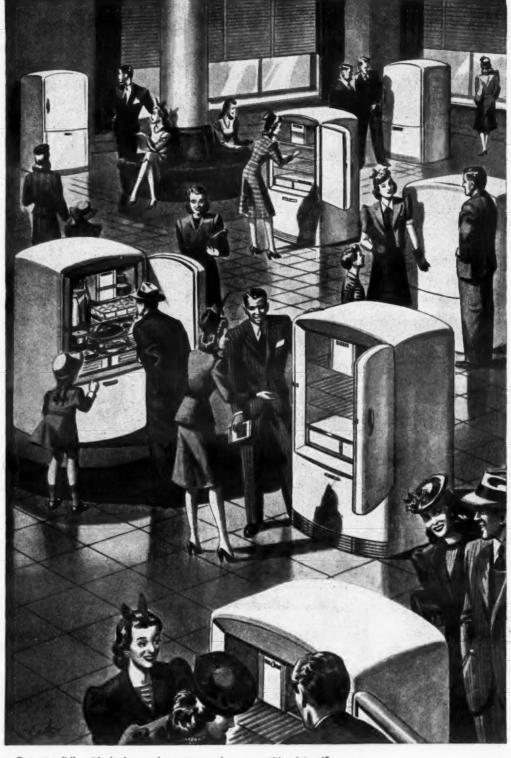
- Food

-

eferred. The or extra complete r satis-

in your first year's selling!





Build volume quickly with your first year's factory production ... get set for a buyer's market

You can get double duty out of your first year's factory output in the \$4,496,734,000 Chicago market. Here is a tremendous pent-up demand for autos, washing machines, refrigerators, "big unit" products generally, in an easily accessible market fortified by diversified income and by billions in savings...famous for its record-breaking volume buying.

A powerhouse in selling

The Chicago market assures enough business to absorb all or the major part of the output of many individual manufacturers. Get the quick distribution and consumer buying you want. Dig in now in preparation for a buyer's market. Do it at one low cost through a single advertising medium—the Chicago Tribune.

Bought, read and bought from as is no other medium throughout the important Chicago market, the Tribune

is a great powerhouse among dealers and consumers.

Practically every other family

One out of every three families in 756 cities and towns of 1,000 or more population in this market reads the Tribune daily—on Sundays, almost every other family. Only the Tribune gives you a choice of monoroto, coloroto, comicolor, newsprint color, or black and white at one of the lowest milline rates in the country.

No matter whether your production is large or small, big unit products or packaged goods, the rich Chicago market will reward your attention. It is far too important to leave wide open to competitors. It offers quick sales, continued dealer and consumer preference when the first easy selling conditions pass and the going gets tough.

For marketing facts and merchandising ideas, call a Tribune representative.



The Chicago Area: Located at the very heart of America; big enough to absorb all that many a factory can make; compact; famous for its wealth and huge buying activity.

Available for your study and use is a specific sales program based on the findings of an auto and household appliance investigation among consumers and dealers. To get these pertinent facts, address C. S. Benham, Manager, National Advertising, Chicago Tribune, Tribune Tower, Chicago 11, Illinois.

Chicago Tribune

THE WORLD'S GREATEST NEWSPAPER

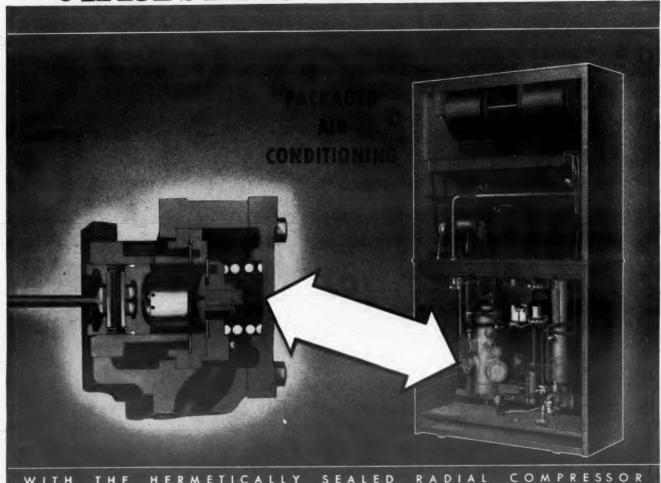
April average net paid total circulation: Daily, over 985,000 Sunday, over 1,300,000.

They'll Do It Every Time . . . By Jimmy Hatlo



- BUY AND KEEP ... WAR BONDS

CHRYSLER CARRENT AIRTEMP



Spring Loaded Safety-Head Assures Trouble-Free Performance

Built-in shock absorbers are a feature of Chrysler Airtemp hermetically sealed compressors. Should a slug of liquid enter a cylinder, the safety spring allows the entire valve assembly to move forward. Shock to the cylinder assembly is prevented—costly repair bills are avoided. With air, dirt and moisture permanently sealed out—this trouble-free radial compressor is designed for heavy duty and long, quiet service. Vital moving parts are superfinished

and pressure lubricated, assuring low upkeep and economical operation. Incorporated in the "packaged" air conditioning units, pioneered by Chrysler Airtemp, these compressors have been time-tested and proven in thousands of applications. For temperature-humidity control turn to Chrysler Airtemp. There is a unit and capacity range ideal for practically every air conditioning requirement. • Airtemp Division of Chrysler Corporation, Dayton 1, Ohio.

Invest in Your Future — Buy War Bonds! You'll enjoy "The Music of Morton Gould," Thursdays, CBS., 9 p.m., E.W.T.

Trade Mark registered AIR CONDITIONING AND



Copyright, 1945, Business New Publishing Co

F. M. COCKRELL, Founder

Published Every Monday by BUSINESS NEWS PUBLISHING CO. 5229 Cass Ave., Detroit 2, Mich. Telephone Columbia 4242.

Subscription Rates: U. S. and Possessions, Canada, and all countries in the $p_{\rm ah}$ -american Postal Union: \$4.00 per year: 2 years for \$7.00. All other foreign countries: \$6.00 per year. Single copy price, 20 cents. Ten or more copies, 15 cents each: 50 or more copies, 10 cents each. Send remittance with order.

GEORGE F. TAUBENECK

Editor and Publisher

PHIL B. REDEKER, Managing Editor

C. DALE MERICLE, Assistant Editor
Ross H. Potter, Assistant Editor
Editorial Assistants: Barbara Lee,
Marcella Price, Dorothy Durand,
Frances Weed, and Lorraine McNinch.

U. S. Patent

James B. Smith, Advertising Mgr. Elizabeth Smith, Assistant Bus. Mgr. Helen C. Henderson, Credit Manager Ruth Richardson, Subscription Mgr.

On leave of absence to serve our country:

U. S. Army: Jack Sweet, George L. Collins, George M. Hanning, and
Hugh T. Mahar. U. S. Navy: Robert P. Nixon, Ed Henderson, John R. Adams,
and Andrew Gantt. U. S. Marine Corps: Paul R. Park. U. S. Army Air
Forces: Jim McCallum, George Watkins, and William Walter. U. S. Coast
Guard: Merton Glutting. Waves: Margaret Marr and Lyndon Jane Brode

Member, Audit Bureau of Circulations. Member, Associated Business Papers.

VOLUME 45, No. 7, SERIAL No. 848, JUNE 18, 1945

Sixty Million Jobs?

ENRY WALLACE, darling of the CIO and of the New York totalitarian school, keeps harping on the theme which he announced, followed by tumultuous applause, at the last CIO convention in Chicago:

"Unless industry can provide 60 million jobs in the postwar period, America must adopt a socialistic form of government."

Unfortunately, we have to take Henry seriously; because it is possible that he may be the 1948 Democratic candidate for the Presidency.

Few among us will deny that it is most important that an opportunity be provided for every useful worker who needs a job, and who wants to work. All such Americans should have their chance at securing productive and remunerative employment.

However, let us hope that this pulled-out-of-a-hat figure of "60 million jobs" won't be accepted by the American public as the measure of the success of Free Enterprise.

Here's why: 60 million jobs filled by this nation's citizens would mean that our country's birthrate would drop alarmingly. It would entail the continued employment of all the lonely women who are now engaged in "war work" because their husbands or sweethearts are no longer in their vicinity.

Let's take a longer look at this "60 million jobs" figure. In 1940 there were more than 10 million farmers in the United States. Who is responsible for the farmer's employment? Answer: the farmer himself!

But what about the hundreds of thousands of groceries, butcher shops, drug stores, barber shops, beauty parlors, small retail establishments, gas stations, garages, service organizations, tourist camps, etc?

Each one of these is an independent worker, planning and managing his own affairs, and producing his own employment

"Industry" (the manufacturer) has nothing directly to do with such employment.

Then there are the doctors, lawyers, school teachers clergymen, and the thousands of others in the service fields—who always have created their own employment, or who have engaged in fields of activity which are beyond the control of "industry"—as too many people today evidently understand the term.

In 1941, manufacturing, mining, and construction industries employed 14.8 millions of persons.

In 1943, 18 millions of persons were at work in these industries—during a period when industry was breaking all previous production records.

Now the point is that manufacturers are responsible only for creating the greatest possible number of jobs in "industry."

They cannot be held responsible for jobs over which they have no control.

So, when someone says: "Unless industry provides 60 million jobs industry should be "socialized,"—let's answer: "Stop and Think."

What do you mean when you use the words "industry," "business," or "private enterprise?"

"Full" employment will require extraordinary understanding and cooperation between industry, agriculture, commerce, finance, educational and training agencies, and public officials.

When all groups are gathered around a table in a spirit of cooperation and mutual respect, teamwork can displace name-calling, and a real opportunity to accomplish something constructive for the good of the nation might possibly result.



y.

ment

ceries small ations

ng and yment.

tly to

achers, -who

ngaged try"-

ustries

these

ng all

e only istry. n they

nillion p and

istry,"

anding nance

spirit

splace ething result

This afternoon, in some distant city, a butcher with his walk-in cooler containing precious red-point meats, places a hurry-up call for a refrigeration service engineer something is wrong with his refrigerating

The butcher faces loss of money, loss of meats and wasted points. But, this very night, a refrigeration service engineer works

to set that equipment working again. Saving the butcher money, protecting his produce . . . helping him to stay in business.

On that service call, A-P DEPENDABLE Refrigeration

Controls went along too. It's a fact, leading refrigeration Service

engineers depend on A-P DEPENDABLE Refrigeration Controls to help them make their service calls 100% successful.

AUTOMATIC PRODUCTS COMPANY

2450 N. THIRTY-SECOND ST., MILWAUKEE 10, WISCONSIN

Export Department THIRTEEN EAST 40th STREET . NEW YORK 16, N. Y.



A-P Model 220 K Thermostatic Expansion Valve. Capacity, to 16 tons Freon.



PENDABLE Refrigerant Values

STOCKED AND SOLD BY REFRIGERATION JOBBERS EVERYWHERE . . . USED AND RECOMMENDED BY REFRIGERATION SERVICE ENGINEERS

WHEN PEACE COMES

WILL AGAIN PRODUCE COMMERCIAL REFRIGERATOR EQUIPMENT FOR CIVILIAN USE

NOW SOME SELF-CONTAINED REACH-IN REFRIGERATORS ARE AVAILABLE FOR THOSE WHO CAN QUALIFY



Write

Wire

Phone

KOCH REFRIGERATORS

NORTH KANSAS CITY - - - MO.

KOCH

A Builder's Views on Appliances

(The following article by D. C. Johnson, Terre Haute, Ind., builder, appeared in *Practical Builder* magazine and is reprinted with permission.)

The Merchant Builder who gives his customers added value by building complete appliance-equipped homes is not in the appliance business. Such homes contain all or a group of the following equipment: refrigerator, stove, dishwasher, disposall, home freezer, automatic heating, and the like.

Such a builder buys from a distributor at a "merchant builder's" price because he is a merchandiser of homes and everything connected with the home. In line with the policy of most responsible appliance manufacturers, this merchant builder enjoys a special price because he buys in quantity.

He is not competing with any

The following article appeared under the heading "It Is Sound Practice to Buy Appliances Wholesale," in the April, 1945, issue of *Practical Builder* magazine, and is reprinted with the permission of that publication.

The article was written by D. C. Johnson, president of Newlin-Johnson Development Co., Terre Haute, Ind., of whom *Practical Builder* says: "Mr. Johnson has been successful in tying up with the appliance business, giving his home buyers the benefits and not losing his identity as a builder."

Mr. Johnson's type of "tie in" with the appliance business is one that is disliked by many dealers, but is published t_0 present one builder's point of view.

retail outlet. He always has gotten similar consideration when buying other materials in quantity, such as lumber, concrete, insulation, etc. Such equipment is handled by the distributor for installation only in new homes. Builders cannot obtain the equipment for any other purpose.

As a merchandiser of homes and equipment operating homes, the merchant builder becomes an added promotional force for appliance business in general, benefiting the distributor, the dealer, and manufacturer.

He does it in this way. The homes of the merchant builder are on view to the public. Many pass through them as prospective customers or in the "curiosity" parade that generally visits sample or demonstration homes which most merchant builders maintain.

New homes set the pattern for old homes, and these new homes in most cases are much better showrooms than the appliance department of the local stores. Less than 2% of the "lookers" in new homes are prospects for a home.

However, they do get ideas, become dissatisfied with their present en-

On this and the following two pages will be found discussions of some of the controversial phases of the question "Should builders equip their houses with appliances before selling them, and if so, (1) how will the builder buy such appliances; (2) on what terms will the purchaser of the home pay for the appliances?" Air Conditioning & Refrigeration News does not necessarily endorse the viewpoints expressed, but presents them because they represent some thinking by men whose experience qualifies them to have a say on the subject.

vironment. They then become customers for a new home or go to the local retail outlet for equipment which they believe will improve the home in which they are now living.

In 1940, the Newlin-Johnson Development Co. began to include the all-electric kitchen in its homes, equipment purchased from a local distributor. Over-all price of packaged house included the kitchen which obviously cost less than the standard retail price.

But to gain this benefit the consumer had to buy a Newlin-Johnson house. In these kitchens, before the house was sold, the retail prices of the equipment were posted and if anyone wished to purchase a single item or even a group, he would have to buy them through the 'regular channel at standard prices.

That procedure is more than just the Golden Rule—it's good business, because in our case it kept the distributor's friendship and his servicing support.

Naturally, when our company first introduced the all-electric kitchen, local dealers resented it and felt that business would be siphoned away from them. But it worked the other way. Business increased for every dealer because the Newlin-Johnson promotion created business for appliances of all kinds.

In addition to newspaper and radio advertising, we erected a G-E model home when first offering applianceequipped houses. The exhibit was highly successful, and as is the case with model homes, attracted most of the people of the community who were interested and thinking about building—not only new homes but home improvements as well. The latter group is always the larger and it was from these that the dealers began getting inquiries.

A builder contemplating a tie-up with appliances must consider several points. He must be prepared to do the volume of business necessary to gain the "merchant builder's" price. Most appliance manufacturers will not consider such a set-up except with operators building not less than 20 homes per year. He must be sure to plan for the servicing of the operating equipment. He should be prepared to do the promotional joh necessary to bring the benefits of the appliance-equipped home before the public.

He should not attempt to "hog" for himself all the benefits he gains on price, but rather pass it on in more house value. His life will be sweeter and his business smoother if he cooperates with distributor and dealer. He can be a definite aid to these outlets and prove it.

The success of promoting the allelectric kitchen has prompted our company to go further into the field including a full line of heating equipment to be used only in the homes we build.



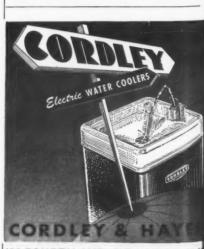
CONSERVED

Refrigeration today is performing a vital service by guarding and preserving for future use, priceless food which might other-

wise be wasted. Write for literature.

GENERAL REFRIGERATION DIVISION





452 FOURTH AVE., NEW YORK, N.

pecialists on drinking water equipment for 56 years

FOGGING STOPS SALES!

INCREASE THE See-Ability

OF YOUR CASES WITH

STRONG PORTS

LIBBEY - OWENS - FORD'S

As a designer and manufacturer of postwar refrigerated display and food cases, you'll want to include every selling advantage in your product. Don't overlook the tremendous advantages of *Thermopane*—factory-fabricated glass insulating unit produced by Libbey-Owens Ford.

GLASS INSULATING UNIT

GET THESE 4 ADVANTAGES OF THERMOPANE

- 1. INSULATING AIR SPACE. The air inside the Thermopane unit is scientifically cleaned, dried and hermetically-sealed. The layers of air give Thermopane its high insulating efficiency.
- BONDERMETIC SEAL. This patented metal-to-glass seal bonds the two or more panes of glass into a single unit. Exceptionally strong, it seals the insulating air space to prevent the entrance of dirt and moisture.
- 3. CLEAR VISION. The patented Bondermetic Seal and the insulation afforded by the sealed-in air space, tend to prevent condensation and frosting up on the inner surfaces.
- 4. EASY TO KEEP CLEAN. Because, regardless of the number of panes in the unit, there are only two surfaces to clean. The inner surfaces of Thermopane units are specially cleaned before fabrication at the factory.

For complete information, write Libbey Owens Ford Glass Company, 6665 Nicholas Building, Toledo 3, Ohio.



LIBBEY · OWENS · FORD
a Great Name in GLASS



HOWELL MOTORS

ELECTRIC MOTORS FOR INDUSTRY SINCE 1915

HOWELL ELECTRIC MOTORS COMPANY . HOWELL, MICH. . REPRESENTATIVES IN ALL PRINCIPAL CITIES

Boar Nati on F

on F Mort this build B Tomo greatest attentio

greatesi attentio on the l other people and be Equal the creof har which trouble. In recsuggeste

mport.

other thing of lances in ing.
Refrig washers, a so-call be sold FHA In er of 1 an agent manufac tailer an The pube sold

in one applianc of 25 ye with hi retire hi Under would b of the hinanced mortgag plan gi example

A buil

homes of \$4,500, v down an a period Insured ... He figur monthly principal and fire If a ref matic v \$455) we the purc

BRA

additiona

for 25 ye

PURO I

WRITI

ELEC

SER

2511 Lak

A Collection Manager's View Of 25-Year-Payment Plans

Mr. Krensel, talking before the annual conference of the Board of Directors of the Credit Management Division of the National Retail Dry Goods Association on "The Possible Effect on Retailing of the Inclusion of Appliances in FHA Insured Home Mortgages" offered a rather thorough analysis of the problems in this plan, which has created something of a flurry among home builders. Part of his remarks are published here.

By Louis Krensel, Collection Manager, Lit Brothers, Philadelphia

be \$37.32.

quired to amortize the mortgage) the

total monthly payment would then

By contrast (I am still quoting

the example given under the pro-

posed plan) if the prospect purchased

comparable equipment through retail

channels, he would be required to

pay 10% down and \$15.80 for 30

months, including a finance charge

of \$64. Thus, his payments for 30

months would be \$50.80 a month,

which is \$13.48 more than \$37.32

I do not approach this discussion

solely from the viewpoint of the

retailer for fear such an approach

may be considered a selfish one; that

it is our ox being gored and, there-

fore, we oppose it. Contrariwise, a

under the proposed plan.

promises America's greatest building program. Public attention is more particularly focused on the building of homes than on any other postwar development. Our people want and need more homes, and better homes, at lower cost. Equally necessary is it to avoid the creation of ideas and thoughts of haphazard financing schemes which must inevitably result in trouble.

It Is

1945,

h the

nt of

whom

tying

s the

siness

ed to

ibit was

the case

most of

ity who

g about

mes but

ll. The

rger and

dealers

a tie-up der sev-

pared to

ecessary

uilder's"

acturers

p except

ess than

be sure

hould be

onal job ts of the

fore the

he gains it on in

will be

oother if

itor and

e aid to

the field,

g equip-

BE

D

ISION

In recent months a plan has been suggested which carries with it such import. This program, briefly, among other things, provides for the building of homes with the major appliances included as part of the dwell-

Refrigerators, ranges, automatic washers, and similar appliances, a so-called "packaged house," would be sold under what is termed an FHA Insured Mortgage. The builder of 10 or more homes becomes an agent or dealer for the appliance manufacturer, eliminating the retailer and, perhaps, the distributor. The prospective home owner would be sold the dwelling and appliances in one sale and payment for the appliances amortized over a period of 25 years, payments being included with his monthly instalments to retire his mortgage.

Under this plan the appliances would be considered essential parts of the home and would be sold and financed as part of the insured mortgage. The proponents of the plan give the following as an

A builder has placed a group of omes on the market to sell for \$4,500, with terms calling for \$500 down and the balance payable over period of 25 years under an FHA insured Mortgage.

Here is how the plan would work, he figures being approximate. The monthly payment, including interest, principal, FHA insurance, taxes, and fire insurance, would be \$35. If a refrigerator, range, and automatic washer (1940 retail price, \$455) were included with the home, the purchaser would make an addiional \$55 down payment, and an additional monthly payment of \$2.32 or 25 years (the length of time re-

ELECTRIC

WATER COOLERS BRANCHES PRINCIPAL CITIES MAIN OFFICE 440 LAFAYETTE ST. New York 3, N. Y. PURO FILTER CORP.

OF AMERICA

DRINKING WATER

WRITE FOR CATALOG



Due to the paper shortage we will not issue a catalog in 1945

SERVICE PARTS CO. 2511 Lake St. Melrose Park, III.

the interest of the consumer. It is not in the interest of the consumer

To Cost the Consumer More?

Primarily, it will cost the consumer more in dollars and cents. While an unwary consumer may readily be blinded by a too-inviting picture of "It will only cost you \$2 or so extra a month," he will actually be paying the fiddler long after the tune has died out.

The consumer is called on to pay an additional large sum of money as interest under the 25 year plan of amortizing his purchases. In fact, he would actually pay \$296 in interest alone on a purchase of \$455, less his down payment of \$55.

Furthermore, the consumer will enjoy the dubious pleasure of paying for his new purchase, while he is still making payments on the old units that have been discarded.

Let us assume, for illustration, that the purchase of appliances will be made under this plan and amortized over 25 years. Ten years after the purchase, the refrigerator, washer, or other appliances most likely will require replacement. Thus the appliances would become useless and discarded, but the consumer would still have to maintain his payments for 15 more long years.

Furthermore, to replace these units, he would then presumably purchase through the usual retail channels and arrange to meet the down payment and the required monthly payments over a period of time to finance the new purchase.

Additionally, with the rapid progress that research and the manufacturer have made and will make, it may well be that the units manufactured and produced during the first year following the termination of the war, will be outmoded within five years because of the technological research and progress that has been

It is a matter of record in the credit world that when extremely long terms are offered, the item that is being purchased becomes obsolete long before payment has been com-

It is expedient for an owner to repair his roof or paint his home rather than walk out on the property; but, the more you widen and enlarge the number of appliances which will require replacement before the mortgage is retired, the heavier the cost of replacement becomes and the more practical it is for an owner to drop his property rather than go through the expense of replace-

In fact, a defaulting purchaser may readily feel he has a right to remove all his appliances, and the confusion of the laws of 48 different states and local custom may aid him in his desire

Legal problems also present them-(Concluded on next page, Col. 3)

can build a DUAL TEMP



NATIONALLY ENDORSED

Pad is adjustable to all makes and sizes of refrigerator cabinets; thoroughly protects finish of cabinet from scratches and mars during moving; easily and quickly put on off; sturdy, lasting construction; easily pays for itself in a short time. Price \$11.75 each.

Attractive lettering of your name on pad at \$2.00 each extra.

For carrying your refrigerator more safely and easily, use the Mastercraft Adjustable Carrying Harness which is a separate unit from the pad and priced at \$8.50 each.

Write for complete folder and prices on pads for refrigerators, washers, ironers, ranges, radios; also furniture pads and protective covers. . . All prices subject to change without notice.



BEARSE MANUFACTURING CO. **Incorporated 1921**

3815-3825 Cortland St., Chicago 47, Illinois



Your refrigeration parts and supply house in Central New York and Northern Pennsylvania

TED GLOU

CENTRAL SERVICE SUPPLY CO.

516-18-20 E. Erie Blvd., Syracuse, N. Y. 209-211 Jefferson Ave., Scranton, Pa.

Phone 5-4000 Phone 3-4000

CAN'T SAY IT TOO LOUD!



THE HARRY ALTER CO. 1728 5. MICHIGAN AVE JOBBERS: WRITE FOR SPECIAL PROPOSITION!

Problems Seen In Long Terms Plan

(Concluded from preceding page) The plan suggests that chattel mortgages be given, but states (Pennsylvania, for various example) have no chattel mortgages, and how effective a mortgage would be on what has always been regarded as personal and not real property is a question.

The point has been made that by affixing the appliances to the premises they will then be made part and parcel of the real estate. But, here again, the consumer is bedeviled because, assuming this to be so, the tax authorities in the various communities might well consider this as an improvement to the real proerty in determining the assessed evaluation for tax purposes.

Surely, if these items are to be made part and parcel of the real estate, it is logical to believe this would have the same bearing on the evaluation of the property as, say, the construction of another room or any other improvement. Over a period of years, the increased taxes the consumer will be called upon to pay, because of the increased evaluation of his home, will total a sizeable amount.

And, once having established the legal principle that such appliances are real estate and not personal property, the perplexities which would be present when the time arrived for replacing these items are apparent.

If these appliances become part of

the real estate, how is the retailer to sell on a lease, replacement appliances which immediately become imprinted with real estate properties? How can such items be repossessed in the event of default?

It must also be pointed out that the consumer's choice of product is nil; the word "regimentation" must stare him in the face. The builder obviously cannot maintain a showroom to display all of the models that one manufacturer may produce, let alone the various models of several manufacturers.

Consequently, all of the dwellings in one operation would have similar types of appliances—this irrespective of the purchaser's preference for certain models, sizes, or color combinations. The consumer is obliged to accept units regardless of his choice.

It is a startling fact that half of the homes built annually are constructed by 5% of the builders of the Nation. Such a small number controlling so large a percentage could readily lend itself to monopolistic practices to the consumer's further detriment.

Therefore, we see that the home owner would be denied his choice of product; pay the additional costs a 25 year amortization would put him to; pay more real estate taxes because of his increased assessment; and be put to the cost of replacement long before he has completed payment for his original purchase. The plan has the glitter, but is it gold?

How Will the Proposed Plan Affect Retailers?

According to a recent survey made by the Office of Civilian Requirements about 2,850,000 families intend to buy or build a home after the war costing less than \$6,000. It is held that 650,000 to 1,000,000 new dwellings will be constructed annually in the postwar years (the number depending upon the particular economist's estimate you choose to accept).

Statistics are dry and, at times, uninteresting, but here are a few that can be considered important:



For Frozen Food Lockers, Deep Freeze Cabinets, Milk Coolers, Fruit and Vegetable Counters, etc. Write for complete information. It will pay you ENGINEERING SERVICE INC.

Sole Agents for YODER REFRIGERATION INC., Manufacturers

4,300,000 families intend to pur. chase mechanical refrigerators after peace comes.

4,200,000 families intend to pur. chase washing machines.

3,200,000 families intend to pur chase ranges.

y which

ractors,

hops m

een out

The ar

ourchase

ore wi

Repair

mecial

arger ar

se the

However.

ile a WI nearest W

o use th

rocedure

(h) (2)

espective

Normally these potential purchasers of homes would arrange to secure their appliances through their retailer. But, if this proposal gains adherents and is found acceptable in some modified form or other in the different States of the Union, one rontractor does not have to indulge in any dework on tailed arithmetical study to determine grators a the effect on retailing and the ensuing loss of volume to the normal materials retail channels.

Many retailers prefer to carry nuarter to carry instalment paper because mitted V their own instalment paper because it insures the customer ultimately all out a making additional visits to the store, additional if for no other reason than to make payments on the account. This of an inditraffic inevitably results in "plus" erator a business. Thus, the absence of these write to visits would result in a further loss of volume.

Numerous surveys concur that the service trades will absorb the greatest number of employables wire may A, an e when the war economy is finally ractor is transferred to peace-time civilian f a busir production. Suffice to say that we s to do t will be confronted with a gigantic or 5A.
o use th task in placing returning veterans and displaced war workers, without the additional burden of securing repair, as employment for the personnel of ment syr retail, service, and distributing agencies. g-1) of

The public has been educated and led to believe that immense progress will be made in the postwar years. n the sch such as restauran It has less confidence in its status quo. Norms of the past have been discarded; established practices no longer taken for granted.

Retailing in the postwar era should profit by the mistakes it has made in the past. Retailers should set up the proper type of sales program that would enable it to sell to the consumer a kitchen unit composed of refrigerator, range, cabinet, and floor covering to suit the fancy and pocket-book of the specific purchaser.

Term it "sales engineering" or what you will, retailing should educate the public to purchase attractive related units. Sales representatives should plan the installation of these units to best add to the attractive-ness of the home and the convenience of the housewife.

The proposed plan is definitely an intrusion and an infringement upon a normal function of retailing. Retailing is too important an arm of the economic body to be thus assailed. We must see our economic body as a whole and preserve it

JUST OUT! NEW FROM COVER TO COVER!

as a whole.



"AUDELS REFRIGERATION & AIR CONDITIONING GUIDE." 4 Books in One: covering the basic principles, servicing, operation and repair.

- 1. HOUSEHOLD REFRIGERATION
- 2. SPECIAL REFRIGERATION UNITS 3. COMMERCIAL & INDUSTRIAL REFRIGERATION
- 4. AIR CONDITIONING SYSTEMS

A gold mine of essential important facts

for ENGINEERS, SERVICEMEN, SHOPMEN AND USERS. A good book is a good friend! Here you will have at you fingers' ends a complete library in ONE VOLUME, the necessary data you have been looking for an MODEM UNITS. SYSTEMS AND MACHINES, REFRIGERANTS, including Freen, Quick Freezing, Lockers, Water Coolers and Air Conditioning Systems. 1280 pages, 46 chapters all fully illustrated and indexed for ready reference and answer to your questions. Size 4% x 6% x 1%. Flexible cover



Old Friends with an Extra Punch



Delivering fully automatic fire at the rate of 750 rounds per minute, the new Inland-made M-2 Carbine is a prime example of the Army's constant quest for improved weapons which master the ever changing problems of tactics and terrain.

It's an example, too, of close collaboration between the Small Arms Division of the Army Ordnance Department, and Inland's engineering and manufacturing organization.

Inland engineers developed the mechanism which permitted the quick modification of the light and deadly .30 calibre semi-automatic

M-1 Carbine, to the selective automatic M-2's which are now flowing off Inland's production line in accelerated quantities.

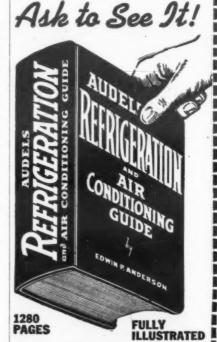
Inspiring to Inlanders is the fact that to G. I.'s these new Carbines are still the same battle-proved fighting companions they always knew-just old friends that pack the extra punch of selective auto-

INLAND MANUFACTURING DIVISION General Motors Corporation Dayton, Ohio

KEEP ON BUYING WAR BONDS



Inland Products for Victory include Carbines, Tank Tracks, Gun Sights, Helmet Liners, Extinguisher Horns, Mortar Bomb Plastic Fuse Body, and Rubber, Synthetic Rubber and Metal Parts for Tanks, Aircraft, Submarine Chasers, Torpedo Boats, Artillery Lighters and Landing Craft.



THEO. AUDEL & CO., 49 W. 23 St., New York 10, N.Y.

Please mail me for 7 days' free examination the books marked (X) below. I agree to mail \$1 in' days on each book or set ordered, and to further mail \$1 a month on each book or set ordered until have paid purchase price.

If I am not satisfied with Guides I will return them REFRIGERATION & Air Conditioning Guide & PUMPS, HYDRAULICS & AIR COMPRESSORS & WELDERS GUIDE BLUE PRINT READING SHEET METAL WORKERS Handy Book SHEET METAL ATTERN LAYOUTS



to pur How Repairmen Can to pur Obtain Copper Wire

WASHINGTON, D. C. - Methods washington, b. c. Interious by which electricians, electrical congrange to ractors, and certain types of repair ugh their shops may obtain copper wire have been outlined by WPB.

The amounts of wire that may be er in the amounts of wire that may be er in the amounts of wire that may be er in the amounts of wire that may be

The amounts of wire that may be er in the purchased by electricians, electrical nion, one contractors, and repairmen doing any dework on electrical appliances, refrighetermine erators and commercial refrigeration, and the and radios is explained in Controlled materials Plan Regulation 9A. Where Materials Fian Regulation 9A. Where more wire is needed in a calendar to carry purter for the kinds of work perbecause mitted WPB said, a repairman must altimately fill out a CMP-4B application for the the store, additional quantity needed.

to make Repairmen doing work primarily t. This of an industrial nature, such as gon-

t. This of an industrial nature, such as genin "plus" erator and motor rewinders, may of these write to WPB in Washington for ther loss special authorization to purchase arger amounts of copper wire.
that the Since only a limited amount of

orb the wire may be purchased under CMP-ployables A, an electrician or electrical cons finally ractor is advised to determine first civilian fa business or activity for which he that we s to do a maintenance or repair job gigantic s listed in the schedules of CMP-veterans or 5A. If so, it may be possible without to use the customer's maintenance, securing repair, and operating supplies allotonnel of ment symbol to purchase the wire tributing meded, as described in paragraph (g-1) of CMP-5 and (h) (2) of ated and CMP-5A.

Businesses or activities not listed n the schedules of those regulations, uch as hotels, office buildings, ave been estaurants, and laundries, may not se the MRO allotment symbol. lowever, businesses not listed may le a WPB-541 application with the earest WPB field office for the right d set up o use that symbol. If granted, the program procedures of paragraphs (g-1) and (h) (2) of CMP-5 and CMP-5A, espectively, will apply.

progress

r vears

s status

tices no

a should

as made

posed of

ncy and irchaser. ing" or uld eduttractive entatives of these tractive venienc itely ar nt upor etailing arm conomi serve i

VER

n: MODERN

ER

rk 10, N.Y. nation the il \$1 in 1 to further

N CITI

Active With Airtemp



ROBERT H. McGINTY District representative for the in the Minneapolis-St. Airtemp Paul area.

Reports from the field, WPB said, indicate that some confusion appears to exist as to what constitutes maintenance and repair. Wiring of new homes, buildings, and garages, and most wiring extensions or additions are classified as "construction" and are not maintenance or repair work, and the wire necessary cannot be obtained under CMP-9A.

In addition, such construction is governed by WPB Order L-41. Certain dollar limits are set by this order, below which WPB approval is not necessary for the job to be done. Where the construction job exceeds this dollar limit, an authorization must be obtained. Usually, that authorization assigns an allotment symbol to be used to obtain necessary wire. L-41 sets forth the application that must be filed and the place of filing. Ordinarily, the person owning the building not the repairman, must file.

New MRO Ratings For Reconversion

WASHINGTON, D. C .- In anticipation of reconversion, preference ratings to permit manufacturers of new civilian automobiles, aircraft, and domestic refrigerators to obtain maintenance, repair, and operating supplies have been assigned through amendments to Schedule A of Controlled Materials Plan Regulation 5, the War Production Board reported recently.

The amended Schedule A, issued May 16, 1945, provides AA-2 ratings for MRO supplies for new nonmiltary passenger motor vehicles, bodies, engines, parts and accessories, civilian aircraft, and domestic refrigerators and parts. The rating of AA-1 is continued for repair parts for refrigerators and is now assigned for repair and replacement parts for civilian automobiles.

The paragraph assigning an AA-3 rating for MRO supplies to manufacturers operating under Priorities Regulation 25 was eliminated in the amended Schedule A. Each of these manufacturers will now use the rating for MRO supplies assigned to his particular business in Schedule Manufacturers whose businesses are not listed in Schedule A may use a rating of AA-5 for MRO supplies under the terms of CMP Regulation 5, WPB said.

Admiral Moves N. Y. Office

NEW YORK CITY-Admiral Corp. has moved its eastern headquarters, under the management of Sidney H. Rogovin, from 1780 Broadway, New York City, to 40 East 32nd St. in the same city.

Removal to the 32nd St. location, Mr. Rogovin explained, makes larger quarters available for display purposes and for distributor and dealer conferences.

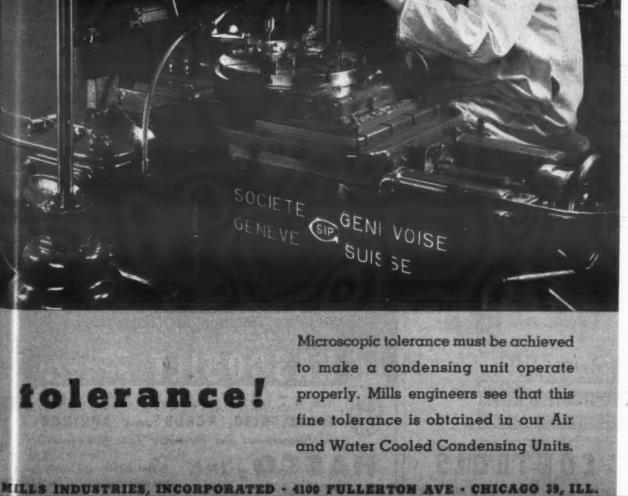


Refrigeration parts and supply jobber groups on the West Coast meet regularly to discuss industry problems. When the San Francisco jobbers met to hear Sterling Smith, formerly chief of the WPB Refrigeration Section and now with Mills Industries, they had guests from other West Coast cities, and Lawrence Roth of Refrigeration Service, Inc., Los Angeles, took this picture.

Bottom row, left to right, are Wyatt Brown, Wyatt Brown Co., San Francisco; A. F. Tudry, Refrigeration & Power Specialty Co., San Francisco; Harold Stern, Refrigerative Supply Co., Seattle; F. H. Mc-Laughlin, Refrigeration & Power Specialty Co.; Jess E. Rauch, California Refrigerator Co., San Francisco and Oakland; Clarence F. (Sandy) Pratt, California Refrigerator Co. Upper row: Robert Hinshaw, Hinshaw Supply Co., San Francisco and Sacramento; N. W. Edwards, Refrigeration & Power Specialty Co.; Lem V. Branson, California Refrigerator Co.; Byron Waters, Pacific Metals Co., San Francisco; and Sterling Smith.

BEN-HUR "Farm and Home" Freezers ARE QUALITY BUILT







The NIAGARA "Duo Pass" Gives Long Life

TO THE SAVINGS, AND INCREASED PRODUCTION CAPACITY, OF EVAPORATIVE REFRIGERANT CONDENSING

• Only in the NIAGARA Aero CONDENSER will you find the "Duo-Pass" pre-cooling method that prevents scale formation on the outside of the condensing coil, eliminating shut-down periods for cleaning, and assuring full condensing capacity at all times.

Thus, with condensing coils that are always clean, the extra heat transfer of evaporation with outdoor air as the condensing medium provides excess capacity, reducing head pressures and giving large savings in power, constantly, to the user. 95% of the water bill is also saved. These savings quickly repay the cost of installation. Write for descriptive bulletin

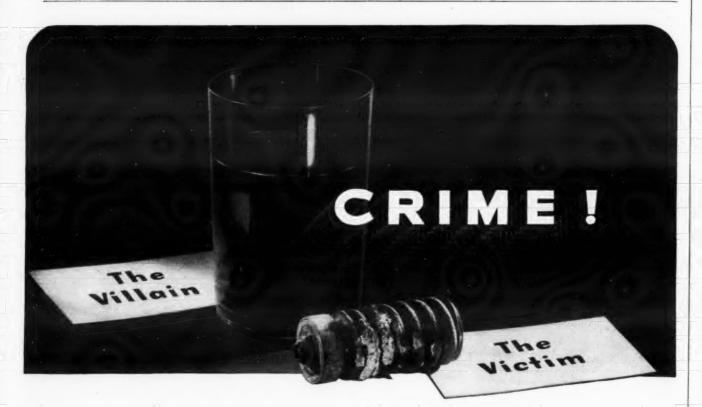
NIAGARA BLOWER COMPANY

Over 30 Years of Service in Industrial Air Engineering Dept. AC-65, 6 E. 45th St. NEW YORK 17, N. Y.

Field Engineering Offices in Principal Cities

EQUIPMENT FOR FOOD INDUSTRIES: AIR CONDITIONERS, DEHYDRATORS, COOLERS, "NO-FROST" METHOD OF PRE-COOLING, FREEZING AND HOLDING, AERO HEAT EXCHANGERS, "DUO-PASS" AERO CONDENSERS

BUY MORE WAR BONDS



• The villain of this story is water—with its three henchmen: rust, corrosion and sedimentation. Together, they were too much for a water valve. Above you see the rusty, corroded remains of its actuating spring—a victim of the agent it was to control-WATER!

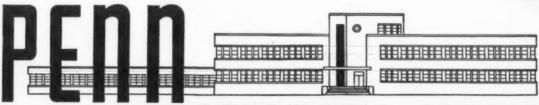
It's a crime to permit water to thus imperil the operation of a commercial refrigerator or air conditioning system. And you don't have to—if you use PENN water valves. They're designed to combat rust, corrosion and sedimentation successfully. Range springs and sliding parts never come in contact with water-dependable, longlife performance is assured. With a PENN

valve there are no sticking seats, no rusty range springs. It is extremely sensitive to changes in refrigerant head pressure-yet free from water hammer, too!

The PENN 246 is built in two stylesflanged and threaded—and in a wide capacity range. Get the whole story about this new-type water regulator in your free

copy of Bulletin R-1986. Write Penn Electric Switch Co., Goshen, Ind. Export Division; 13 E. 40th Street, New York 16, U.S.A. In Canada: Powerlite Devices, Ltd., Toronto, Ontario.



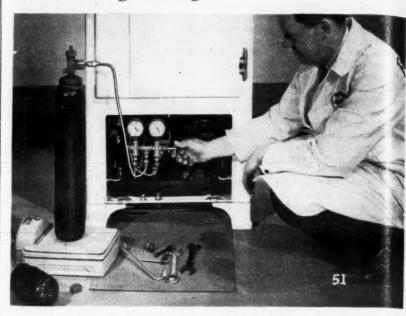


FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

Servicing Frigidaire Serv **Open-Type Systems**

Instalment No. 12

46—Adding Refrigerant

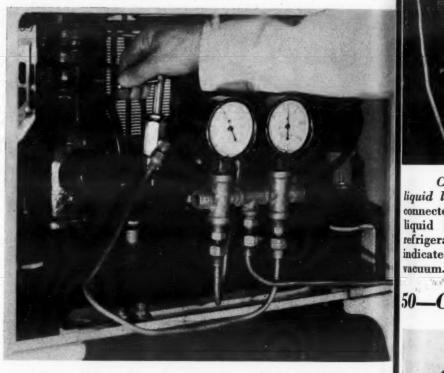


Adding refrigerant to the high side float system requires the same equipment and procedure as for the low side float system. The exception is that when adding refrigerant to the high side float system, the amount must be absolutely accurate.

This accuracy is essential, inasmuch as a shortage of refrigerant in the high side could result in the complete lack of refrigeration, whereas an oversupply could cause a frost back by completely filling the freezer and passing down the suction line.

To assure correct charges, add refrigerant in small amounts at a time, stopping when the frost extends two or three inches from the freezer.

47—Purging the System



It is obvious that when purging a high side float system, not only the condenser but the float chamber itself must be purged in order to evacuate air that would not be removed otherwise.

To purge, first install the high pressure gauge to the compressor discharge valve and connect the suction gauge to the top of the float chamber. The illustration shows how the adapter is used in making this connection.

Having installed the gauges, open the discharge valve on the condensing unit and crack the valve on the high pressure gauge, permitting the refrigerant or air to escape, as the case may be. As soon as the pressure has been reduced to the desired reading, backseat the compressor discharge valve. Then open both the gauge suction valve and the valve on the high side float by means of the service adapter as shown. This should be left open for only a few seconds, which will assure sufficient purging. This is the final step of the operation; now close all valves and proceed to place the condensing unit in operation



VALVE, DISC, REEDS and SPRINGS for Conventional and Hermetic Type Compressors

If your jobber can't supply you, send for illustrated catalog and price list. GREENSBORO, N. C.

out of t will be which v At this remove valve ar

reduce unit and

is reach

is funne

previous

funnel

assembly connection

rises to

Servicing Frigidaire Systems

48-Adding Oil

equires

gh side

te lack

st back

on line. mounts

inches

ve on

essure

e may esired

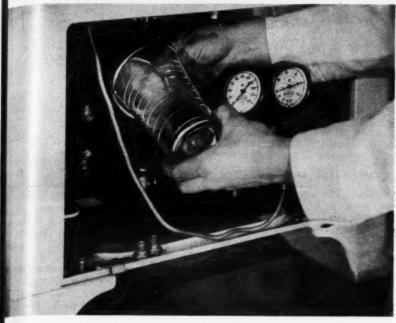
open

ı side

hould

ficient

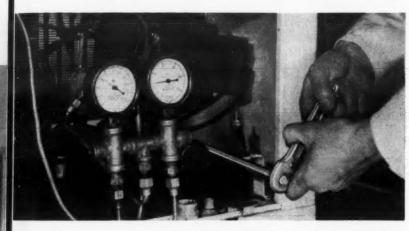
ation



Adding oil to compressor bodies used on the high side float system, is a very simple operation. Install gauges and reduce the crankcase pressure to 15 inches of vacuum. Stop the unit and by-pass pressure through gauge set until ½ lb. pressure is reached in crankcase. Then the oil plug is removed, the oil supply determined with a measuring stick, and the correct amount is funneled into the crankcase.

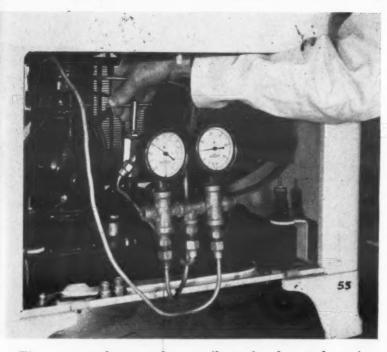
The proper oil level should be up to within $1\frac{1}{2}$ inches of the top of the oil hole. If desired, the oil may be added as previously described for the low side float system, although the funnel method is much simpler.

49—Changing Float Valves—First Step



Connect gauge to top of float chamber and close receiver liquid line valve. The servicing connection on the gauge set is connected, as shown, to the float chamber. After closing the liquid line valve allow the compressor to operate until all refrigerant has been removed from the freezer. This will be indicated when the low pressure gauge shows 20 inches or more vacuum.

50—Changing Float Valves—Second Step



Then open adapter valve on float chamber and suction valve on gauges, which will permit the refrigerant to be drawn out of the high side float chamber. Notice that the chamber will be temporarily covered with frost, the disappearance of which will indicate that all refrigerant has been pumped out. At this time, close the adapter and gauge suction valve and temove adapter and line. Then open the high pressure gauge valve and slowly crack gauge suction valve. When pressure rises to ½ lb., both valves are to be closed.

Now loosen both float connections, remove the old float assembly, and install the new one. Then, after tightening the connections carefully, open the valves and test for leaks.



MERCHANT & EVANS CO.

2035 WASHINGTON AVENUE, PHILA, 46, PA.

PIONEER MANUFACTURERS OF FIN-TUBE PRODUCTS

MUELLER BRASS CO. LIQUID INDICATORS WILL NOT LEAK







The improved design of our liquid indicators is effective assurance against refrigerant leakage around the sight glass. The sight glass is sealed into the forged brass

body by a heavy Neoprene gasket which, in turn, is compressed by a packing gland, which forces the pliable gasket along the sides of the glass and produces a perfect seal.

Mueller Brass Co. Liquid Indicators are made in a complete range of styles and sizes. The

seal cap and open port type may be installed where light conditions are favorable. Where the light is poor, we recommend the use of our double port liquid indicators

illustrated here. By flashing a light through one port, the exact condition of the refrigerant may be determined through the other port.

The new design of the compression gland permits the use of standard wrenches for tightening.

NOTE: All models of Mueller Brass Co. filters and line strainers may be obtained with female flare connections on one end. This makes it possible to assemble any desired filter to a liquid indicator for installation in the liquid line of the system.

MUELLER BRASS CO.

PORT HURON, MICHIGAN



"HOW DRY I AM!"

In the case of this young man, a bounce of prevention is worth many a trounce of cure.

For the "young" refrigeration unit, moisture prophylaxis is infinitely better than subsequent dehydration. TZ will do it either way, but the wise engineer prefers the preventive technique to the curative.

A TINY AMOUNT -> A BIG JOB - SMALL COST

THAWZONE The PIONEER FLUID DEHYDRANT

HIGHSIDE CHEMICALS CO. 195 Verona Ave. NEWARK 4, N. J.

Army Refrigeration Problems

By P. B. Reed

Manager, Refrigeration and Air Conditioning Division, Perfex Corp.



eat

Insulation

insula nearne

ulation

It is, th

sulation

e refrig

be sure

ewpoint

event th

isture

"moppi

HEAT

Let us t

ator the

de, and

inches

rature

ith the

peratui

n were

inches th But the

ick, not

at passi

Determining the Heat Leakage

The term "Refrigeration" is applied to the process of taking heat from one place and transferring it to another place. When heat is taken from a place, that place becomes cooler; the faster that heat is taken away, the cooler the place becomes. The heat that is taken away is carried to another place which becomes warmer; the faster that heat is put into a place, the warmer it becomes.

The place from which heat is taken and which is being cooled must be enclosed to keep large amounts of heat from flowing in from nearby, for heat flows "downhill," that is, from places of higher temperature to places of lower temperature.

Thus, it is necessary to enclose the place to be cooled. This enclosure is called a refrigerator, a cabinet, a cooler, a case, a fixture, or some-

HEAT THROUGH A SOLID WALL If the door of the cabinet is kept

closed, all of the heat that is to be removed from inside the cabinet must come in right through the walls. In a given time, for example, 24 hours, the amount of heat that passes through the walls depends upon:

1. AREA OF THE WALL

The number of square feet in the outside shell of the cabinet. The larger the cabinet the more outside surface it will expose to the warm outside air and consequently the greater will be the amount of heat that will come in.

2. TEMPERATURE DIFFERENCE

The difference in temperature between the outside air around the cabinet and the inside of the cabinet. The greater this temperature difference the faster will heat flow in and the greater will be the heat that must be removed in order to maintain a comparatively constant temperature inside cabinet.

3. HEAT CONDUCTIVITY

This is sometimes called the "k" factor. It is simply the amount of heat that 1 square foot of the insulation 1 inch thick, will pass in one hour, if there is a difference in temperature of only 1° between the two sides of the insulation. This factor varies for different materials



but is usually about .25 to .30 B.t.u for the commonly used insulations.

Other materials that are not conhat it wi sidered insulation have "k" factors that run much higher. From the following table it will be seen that ne insula whereas the "k" factor for sheet cork is .28, for brick it is an average of about 7.00, or 25 times as much

herwise, Under the same conditions a brick wall would pass about 25 times as lation a much heat in the same length of It is qui time as a sheet cork wall of equa e placed thickness.

Material Con		ductivity k	
Corkboard		.28	
Glass Wool		.26	
Cane fiber			
Mineral wool		.27	to .33
Sawdust			
Brick, common		5.00	
Brick, face	. :	9.20	
Concrete or stone	1	2.00	
Plaster		3.30	
Wood, average		1.00	
Fir, soft pine, etc. (abou	t)	.75	
Yellow pine (hard pine)		.84	to 1.04
Hard woods; oak,			
maple, etc. (about)		1.15	

nch this These values are for the materials fference when dry. Most insulations are very akage," bad about absorbing moisture and rough must be wrapped and sealed in 5 x .28 c moisture-proof paper or their surfaces sealed with pitch applied hot But the o instead If the insulation becomes moist its hich is fo conductivity rises a great deal; so 1º onl much so that it loses most of its So 50 ability to retard the flow of heat. ich is uld ente

4. THE THICKNESS OF THE INSULATION

The amount of heat that passe through an insulation varies inversely as the thickness of the insulation. That is, if the insulation is 2 inches instead of 1 inch thick the amount of heat that passes through will be only one-half as much-not twice as much; 3 inches, 1/3 as much, etc. If the insulation is 1/2 inch thick instead of 1 inch then the heat passing through will be twice as much (Concluded on next page, Col. 1)



* Increase overall capacity.

Reduce running time up to 20%

. . . prevent sweating and frosting of suction lines, as well as oil slugging, and bring "on-the-line" jobs within the normal cycle range.

"Fractional Tonnage" ECONOMIZERS

. . . are no longer considered "unnecessary gadgets." Data now available substantiates all claims for appreciable increase in overall capacity. One

should be installed in each evaporator circuit of every commercial and industrial refrigerating system. Pressure drop is negligible . . . capacity per unit size is extremely high . . . all joints are silver soldered.

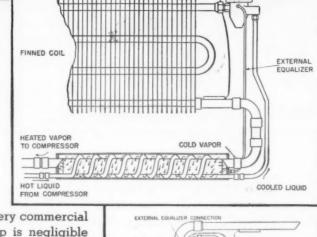
"Hy-K" ECONOMIZER-ACCUMULATORS

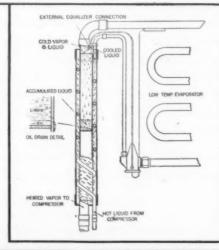
... have high ratio of prime to secondary, and liquid to vapor surface . . . Positive vapor contact with all surfaces . . . Maximum capacity per unit size.

"Hy-K" Economizer-Accumulators are equally suited for use in high, medium or low temperature systems.

> If you haven't a copy of the new Superior Catalog R-2, request one today.

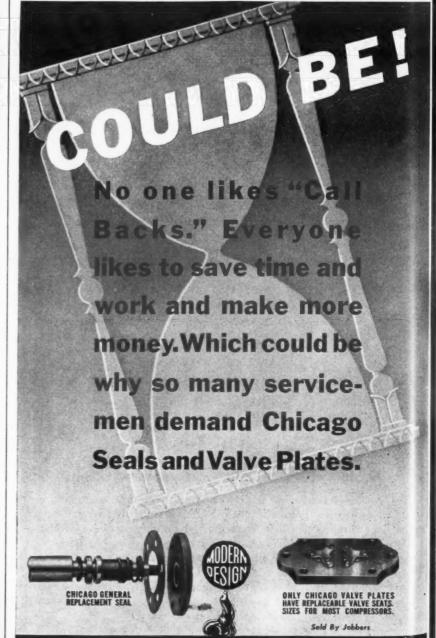
No. 129





VALVE & FITTINGS COMPANY PITTSBURGH 26, PENNSYLVANIA

OFFICES IN PRINCIPAL CITIES . STOCKS CHICAGO (6) . LOS ANGELES (15) . JOBBERS EVERYWHERE



CHICAGO SEAL CO. 20 N. WACKER DR., CHICAGO 6, ILL

Heat Leakage--

(Concluded from preceding page) Insulation is not to be thought of a stop to the passage of heat, but ther as a means of slowing down nd retarding the passage of heat. here is a gradual drop in temperare through the insulation as shown Fig. 1. The temperature within e insulation varies according to nearness of that point within the sulation to the outside surface.

.30 B.t.u. It is, therefore, important that the sulation be thick enough, not only at it will reduce the heat load on factors e refrigerating machine, but also be sure that the outer surface of e insulation is warmer than the ewpoint of the surrounding air; herwise, if the outer surface is low the dewpoint, moisture will s a brick ndense on the outside of the intimes as lation and the cabinet "sweats." It is quite important that a barrier

placed around the insulation to revent the entrance of moisture; a oisture seal of refrigerator paper "mopping" with hot pitch.

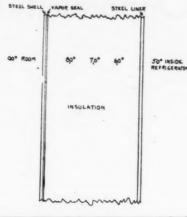
HEAT LEAKAGE EXAMPLE

Let us take for example a refrigator that is 5 feet high, 6 feet ide, and 2½ feet deep and has inches of sheet cork. The tem-rature outside is 90° F., inside F. (a difference of 50° F.). We ill take the "k" factor for sheet ork as .28 B.t.u./hr./sq. ft./degree. The outside area is 115 square .84 to 1.04 So if the insulation were inch thick and if the temperature fference were 1° than the "heat akage," the amount of heat passing rough in one hour would be 15 x .28 or 32.2 B.t.u.

But the temperature difference is o instead of 1 degree, so the 32.2 hich is for a temperature difference 1º only, must be multiplied by). So 50 x 32.2 equals 1,610 B.t.u., f heat. hich is the amount of heat that ould enter this cabinet in one hour, with the doors closed) with a 50° mperature difference, if the insulaon were 1 inch thick instead of inches thick.

But the insulation is 2 inches ick, not 1 inch. Therefore, the at passing through will be oneof what it was for 1 inch

Fig. 1 Temperatures Within Insulation



insulation, or 805 B.t.u.

Ordinarily, heat loads are calculated on a basis of one day rather than one hour, so the 805 B.t.u. must be multiplied by 24 in order to get the heat leakage for one day instead of one hour. So 805 x 24 equals 19,320 B.t.u. per day. Heat leakage is only a part of the total heat load.

This is the heat leakage load, that is, it is the amount of heat that passes through the walls of this empty refrigerator that has 2 inches of cork insulation, in 24 hours, with the door kept closed, in a 90° F. room and maintaining 40° F. inside the refrigerator. It is not all of the heat that gets in the refrigerator; some gets in when the refrigerator doors are opened.

THE SERVICE LOAD

This is sometimes called the "service load" or sometimes the "usage load." It is greater if the door is opened often or allowed to stand open for considerable periods. It can be and frequently is, a very large part of the total load.

The "product load" is the heat that is brought into the refrigerator with the food that is put in. If the food is warm and there is a great deal of it, then the product load is a large load. On some installations it is not enough to consider; on others it is much greater than all other sources of heat that must be removed from the refrigerator cabinet.

The Service and Product loads will

Here's the Easiest Way to Find a V-Belt

For Dealers Selling

Replacement Items

For Designers

New Equipment

for ANY Requirement

be considered later and, added in with the Heat Leakage, will constitute the complete Total Load, for the Total Load must be the guiding factor in selecting the refrigeration equipment.

RADIANT HEAT

In discussing the heat leakage load above, no mention has been made of two very important factors, radiant heat and reflection of heat.

Radiant heat is radiated out from a hot object and may pass through a cold space, as the radiant heat from the sun heats the earth even though it passes through the extreme cold of millions of miles of

In refrigeration we do not ordinarily have to take radiant heat into our calculations unless one or more sides of the refrigerator are subject to the direct rays of the sun or of some other heat source, such as a stove, furnace, boiler, or other apparatus that is considerably above room temperature. In air conditioning one or more walls or the roof may be much warmer than the others due to the sun effect.

REFLECTION OF HEAT

All heat that strikes a refrigerator wall is not absorbed and does not have to be retarded by the insula-Heat is reflected by bright, smooth surfaces in much the same manner that a mirror reflects light. A white or bright slick surface may reflect most of the heat falling on it, while a black, rough surface will absorb most of the heat.

In fact some materials such as steel, glass, and aluminum, that conduct heat readily, may be used as insulation by placing several layers of these materials, bright and smooth in the cabinet as insulation. The outside sheet reflects some of the heat, the next sheet some more, until after several sheets most of the heat has been reflected back to the outside.

Such insulation can be very effective. Two or three layers of glass are used in display cases to give visibility and at the same time act as insulation. Three sheets of plate glass, properly sealed, have about the same insulation value as 1 inch of ordinary insulation, that is, their "k" factor is about .30.

CARTRIDGE DEHYDRATOR With Side Outlet and Dispersion Tube This exceptional design permits easy removal and replacement of cartridge without loosening end connections. Dispersion tube for increasing drying efficiency and minimizing pressure drop is incorporated as integral part of refill cartridge. Ask your jobber for it. Filled With Silica Gel or Activated Alumina

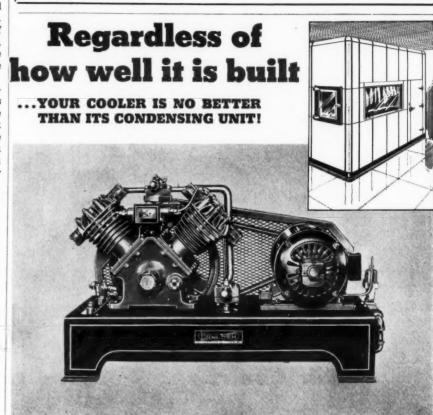


Catalog Service

Manufacturers know that sales volume is tied directly to the ease with which potential buyers can select and order their products. In printing and distributing catalogs to the trade, and in distributing the manufacturer's technical bulletins, the NRSJA jobber makes it easy and convenient for the prospect to buy. Jobbers' catalogs reach every potential buyer in the industry.

NATIONAL REFRIGERATION SUPPLY JOBBERS ASSOCIATION Dependable Distribution

Headquarters Paramount Building, Cincinnati, Ohio



With Dayton V-Belts you can meet all power transmission requirements for all types of

household appliances and small machines.

Just be sure you have one of these two Dayton catalogs. They'll save you time and trouble . . . solve your belt selection problems at once. To find the belt required, you turn to the simplified tables in these catalogs and quickly select the drive which meets specific requirements, it's just as easy as that!

And when you specify and sell Dayton V-Belts you give your customers a belt that performs better, lasts longer. The patented construction of these belts gives greater strength and endurance. They won't squash, twist, vibrate, stretch. They pull better and operate quieter.

Write today for the catalog designed for you.

THE DAYTON RUBBER MANUFACTURING COMPANY DAYTON 1 - OHIO



Appearance, quality of materials that enter into its production, and proper insulation are, of course, important factors in the construction of a refrigerated cooler. But of what avail all of these advantages if it is equipped with an inferior condensing unit—the heart of its refrigeration system? And remember that the compressor is the most important part of the condensing unit.

If you are contemplating placing an order for a cooler of any type, specify that it be equipped with a reliable condensing unit . . . a BRUNNER UNIT. Brunner engineers are experts in the design and construction of industrial and commercial refrigeration condensing units. Their specialized experience of more than 37 years in the design and production of compressors, qualifies them to give sound and valuable

advice on any refrigerating problem. They are constantly rendering this service to designers and builders of all types of coolers-reach or walk-in-or for locker plants. This specialized experience has enabled them to design refrigeration condensing units to meet the refrigeration requirements of any type of cooler. Brunner Units have established an enviable reputation for service stability and accessibility as well as for reliability, efficiency and economy in thousands of applications throughout the world.

Ask Brunner to explain the new refinements of design and closer tolerances of their condensing units. There is a Brunner factory representative near you ready to discuss any problem of refrigeration you may have. He will be glad to see you. Write.



materials are very ture an ealed in neir surlied hot moist its deal; so st of its t pass inversel sulation. 2 inches

ulations.

no con-

a average

of equal

activity k

.28

.26

.04

.00

.20

2.00

3.30

.00

.75

.27 to

ch thick eat pass is much Col. 1)

amount

will be twice a ich, etc



Back the Attack - - Buy War Bonds



You know, the services that make a company BIG are the ones I want

And manufacturers grow big by offering that little bit extra . . .

Extra service to help a dealer out of a jam ... extra care with sales and service promotions ... extra attention to the sales appeal and mechanical perfection of their products.

It all adds up to the fact that if you'd like an extra helping of extra service from a big Turn to G-E!

And from G-E research...G-E merchandisers ... comes the promise of better products . . . better selling aids... better national advertising campaigns... to make better profits for you in the peacetime years ahead.

General Electric Company, Air Conditioning Department, Section 5706, Bloomfield, New

BUY ... and hold ... WAR BONDS



Air Conditioning

Tune in: The "G-E HOUSE PARTY," every afternoon, Monday through Friday, 4 p. m., E W T, C B S... The "G-E ALL-GIRL ORCHESTRA," Sundays, 10 p. m., E W T, C B S... "THE WORLD TODAY" News, Monday through Friday, 6:45 p. m., E W T, C B S

'Serve Self' Food Stores Ofference Opportunity to Fixture Deale Wide

TOLEDO—Popularity of the "serveself" type of independent grocery store and meat market, growing rapidly in pre-war days, has been given terrific impetus by wartime conditions.

But more than that, says F. I. Davison, manager of Toledo's McCray Refrigerator Corp. branch, the "supermarket" type of operation for even the smallest kind of grocerystore meat-market combination has proved that it is a sound and efficient method of retailing foodstuffs.

Mr. Davison speaks with authority, for the commercial refrigerator and store fixture distributing firm which he directs has been responsible for the conversion of about 150 retail food stores in the Toledo area to the serve-self type of operation.

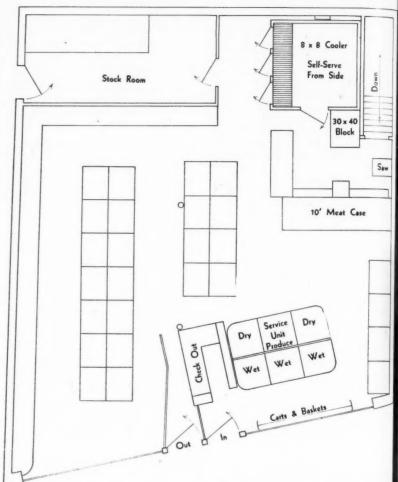
"A number of these jobs of converting stores to the 'supermarket'

style have come about because shortages of manpower—the groce family going off to war, and full-ti help difficult to find. These sa reasons have helped to get priorit on some of the equipment needed renovate the stores.

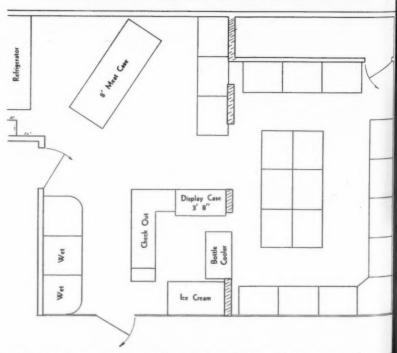
"What the owner learns is that can operate a combination groce store and meat market with two fi time workers. The proprietor handle the meat counter, and his or daughter can take care of checkout stand. With the help of boy who comes in after school stock up the shelves, they can along nicely.

"The important thing about t conversion to 'supermarket' st stores, from the dealer's standpo is that the small food store ow rarely has any idea of how to

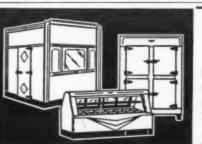
(Concluded on next page, Col. 1



This is one of the larger "super markets" for an independent gro laid out by F. L. Davison of McCray's Toledo branch. Note the cool in the back with "serve self" doors. Commercial dealers can sell m of the shelving and display islands that go into such stores.



This is a "one man" operation, designed for a store owner who w behind the meat counter, while his wife or children can oper the check-out stand.



INQUIRE NOW ABOUT INTERESTING PROPOSITION TO QUALIFIED DISTRIBUTO FEW TERRITORIES

TILL AVAILABLE

. REFRIGERATOR COMPANY . SI

al service That's

the F trained etty ha d after the If the I actly wh

splay But isn' sell a reach-in "No, it at's all . Davis ther th

out eve ovation d baske The Tol thusiasti "steel "It's eas and the points o

Suppose, dernize e of or existing

The right narket, f

well estal heavily in

tear, givin

Offerend To 'Serve Self' Store Leads To eale Videspread Market Renovations

Concluded from preceding page) because nout planning the change. He needs the groce me one to plan the whole new layand full-tit for him. That's what gives the These sateler an opportunity to perform a get priority al service in doing his selling job." That's where Mr. Davison comes nt needed to the picture, too. Although not trained draftsman, he's become ion groupetty handy on a drawing board, ith two find after talking the matter over pprietor out the prospect Mr. Davison and his court a new layout for the prietor o etches out a new layout for the

ne help of If the prospect approves the layt, a detailed blueprint is made hich shows in a scale drawing actly where the counters, shelving. splay case, walk-in cooler, and eckout stands will be located.

care of

ney can

standpoi

store on

how to

he co

about t But isn't this a lot of work just sell a display case and possibly reach-in or walk-in box?

ge, Col. 1 "No, it would be justified even if at's all we were selling the man," Davison replied. "But we go rther than that—we self him just out everything he needs for the novation plan—steel shelving, carts d baskets, slicing machines, saws, d scales. It's all part of the jobhy shouldn't we sell it?"

The Toledo dealer is particularly thusiastic about steel shelving and "steel islands" that he handles. "It's easy to sell, we get cash for and there is no service problem," points out.

Suppose, however, that the prosct is convinced that he should dernize his store to a serve-self pe of operation, but believes that existing equipment is too good to

Naturally, Mr. Davison attempts to sell him new equipment if possible, but in many cases he will "operate" on the old equipment—cutting sidewall shelving down to a height where all shelves are accessible to the customers, and perhaps adding a new shelf at the bottom. He keeps a force of eight cabinet makers busy at this work, and in fixing up an occasional old display case taken in on a trade-in that is worth rebuilding.

What does Mr. Davison think about 'serve-self" possibilities in frozen foods?

He thinks it will make some definite progress, when the equipment that will make it possible is again available, and as the food retailers become more frozen food minded. In one of the larger markets which he has equipped, he has designed a "serve self" arrangement of frozen foods which serves the purpose very well under present conditions, and which he doesn't think is too bad a scheme under any conditions.

A "stand" of cold plates, so built as to constitute a piece of shelving in itself, forms the shelves in a walk-in box. On an aisle which the customers use, heavy refrigerator doors permit easy reach-in access to these "cold plate" shelves, which Mr. Davison claims will provide much more capacity than the conventional frozen food cabinet.

Location of the items are designated by display cards on the door, so that the customer may make a selection. If he builds another installation similar to this one, Mr. Davison thinks he will make use of Thermopane glass doors so that

visual display will be possible.

A door leading into the cooler from the meat department permits the shelves to be re-stocked when necessary without interfering with the customers.

Granting that the "serve-self" idea is continuing its gains in the metropolitan areas, how is it faring in the towns, villages, and crossroads stores? Since Mr. Davison covers a considerable rural area in parts of three states around Toledo, he can supply an answer.

"Generally, you can say that the closer the small town is to the big city, the faster the 'supermarket' idea has taken hold," he says. "I believe we've put in a job in nearly every county seat in our territory. And there's one thing about it-once you have converted one store in a town, the others often want to follow-in a hurry."



ADD THIS TO YOUR NOTES ON LOW-TEMP. EQUIPMENT . . .

Wilson ZEROSAFE

For the Retail Storing and Dispensing of Frozen Foods

DEFINITELY NOT EXPERIMENTAL . . .

Wilson ZEROSAFE Reach-Ins for the Storing and Dispensing of Frozen Foods were designed with the same engineering know-how that has distinguished the Wilson ZEROSAFE Reach-In Farm Freezer . . . Wilson has solved Freezing and Storing problems since 1939.

BIG IN CAPACITY . . . SPACE-SAVING . . . EASY-TO-USE . . . "EXPANDABLE" . . . FIRE-SAFE . . . MODERN

Models in sizes and multiples of sizes to meet every conceivable need.

WILSON CABINET CO.

SMYRNA DELAWARE

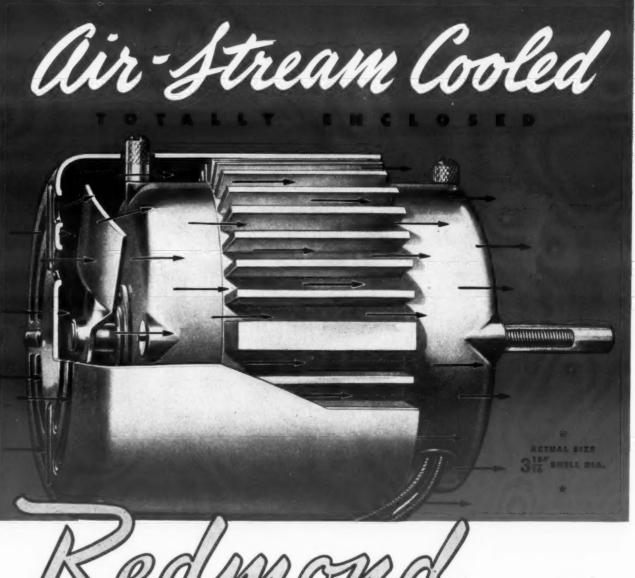




The right-hand section of this refrigerated section in a "serve-self" market, from which milk and dairy items are obtained, is a pretty well established feature in such stores. At the left, however, is a heavily insulated section with special doors, from which frozen foods may be obtained. Contents of each section are listed on the door.



View through one of the larger markets, with refrigerated section at the hear, giving idea of the amount of equipment which goes into such stores.



THEY'RE not restricted to fan duty, for they have an enclosed forced air cooling system.

You'll find Redmond shaded pole Micromotors suitable for applications which many other motors of comparable power can't handle.

If you build heaters, air-conditioners, ventilators, agitators, small pumps, ranges, butter churns or similar items that require motors up to 1/25th horsepower, get in touch with the Redmond Company today. Ask about the Type "T" Micromotors.













AC AND DC MICROMOTORS, DYNAMOTORS, CONTROLLERS AND BLOWERS

Electrimatic

AUTOMATIC CONTROL VALVES AND REGULATORS

2100 INDIANA AVENUE · CHICAGO 16, ILL.

Over 75 YEARS REFRIGERATION EXPERIENCE

is on the record of the 5 Key men in the West's most modern Supply Jobber and Equipment Distributor.

WHAT DOES THIS MEAN TO YOU?

Simply This! If you are a dealer, contractor, or service operator in our area . . . design, engineering, sales, and financial assistance in ADDITION to a COMPLETE source of supply.

If you are a manufacturer of equipment, parts, or supplies an alert experienced organization ready and able to promote finer products for the good of the industry.

Refrigeration - Air Conditioning - Products - Parts and Supplies 944 South I Grand Avenue, Los Angeles 15, California

Postwar Possibility



This unusual drinking water cooler is an example of what some designers are considering for postwar products. The model above was restyled for Sunroc Refrigeration Co. of Glen · Riddle, Pa.

Gerald P. Hopkins, Official Of Commercial Credit, Dies

BALTIMORE-Gerald P. Hopkins, vice president of Commercial Credit Co., died here recently. Starting with the company as a junior clerk and runner, Mr. Hopkins rose to the post of vice president in 1933. In 1941, when Commercial Credit Co. acquired the National Bond & Investment Co. of Chicago, Mr. Hopkins was made executive vice

Stoker Sales Policy Hit In Suit by Govt.

CHICAGO-U. S. Machine Corp. of Lebanon, Ind., recently agreed to a consent decree in a Federal civil action alleging conspiracy to restrain trade in the sale of furnace stokers. The company maintains a sales office here.

Co-conspirators in the suit were 23 dealers in Winkler stokers, which are manufactured by U.S. Machine

Alleging that these stokers were sold at varying prices, the government said that prospects were registered at the Chicago sales office to prevent the prospective purchasers from "shopping" for the lowest priced installation.

The government asserted that when a dealer recorded the name of a prospect previously registered by another dealer at a higher price, the second dealer was told he could not fill the order.

Judge Michael L. Igoe, in addition to signing the consent decree, directed that all prospect files described in the suit be destroyed and that the government be allowed to make periodic inspections of the

Leon Hoffman Quits FEA For Post With Exporter

NEW YORK CITY-Leon F. Hoffman has resigned his position with the Foreign Economic Administration in Washington, where he was in charge of Export Licensing of commercial and industrial refrigeration equipment for the past two years. He has become associated with Dodge & Seymour, Ltd., of New York, export sales representatives, as manager of Middle East operations, with headquarters in Jerusalem,

Mr. Hoffman has had long refrigeration experience in the Middle East, having been distributor for Kelvinator Division of Nash-Kelvinator Corp. in Jerusalem for many years. He also was previously associated with a financial institution in Jerusalem, a subsidiary of the Palestine Economic Corp. of New York.

Promoted by Crosley

Monit

nt Hom

to 20

expe

There

return

replace

liance

discont

r, prov

rily red

threate

e sale of

ess prove

aught w

ndent de

al reason

Lines W

ealers a

of Refrige

ARTS

the soon you'll like

AIRO

2732



JOHN W. CRAIG

Craig Heads Crosley Plant In Richmond

CINCINNATI—John W. Craig h been named general works manag of the Richmond, Ind., plant of T Crosley Corp.

Mr. Craig, who is 38, is a nati of Troy, Ohio, and a graduate of t University of Dayton, in 1929, w a B.S. in mechanical engineering He joined the Crosley organizati in 1937 as assistant chief refriger tion engineer, later being promot to chief refrigeration engine Previous to joining Crosley he served over eight years in the en neering department of the Frigidal division of General Motors.

For the past four years, Mr. Cr. has been devoting most of his effor to the development and impro ment of the Mark 14 anti-aircra gunsight, which Crosley has b building in large volume for U. S. Navy.

Richmond Air Conditioning To Erect New Building

RICHMOND, Va.-Plans for e tion of a building at 3315 W Broad St. by the Richmond Conditioning Co. have been appro by the Bureau of Building Inspec



"The instrument that detects control defects."

A pocket size Tester that accurately and quickly analyses a defective thermostat.

The service men in the field and shop have for a number of years asked for a device by which it would be possible to tell accurately the performance of thermostatic This long felt need is now a reality. ingenious and exclusive method used in this tester is now available at low cost to every service man.

THERMOSTATIC CONTROL TESTER (Model A100) \$19.50

FEATURES:-

- 1. Indicates quickly cut-in and cut-out temperature.
- 2. Does not require removal of control from cabinet.
- Eliminates un-warranted tampering with thermostatic controls.
- Shows customer defective part.
- Scientifically designed for easy operation.
- Excellent shop tool for adjusting controls.

Order Direct or See Your Jobber

AIRCRAFT SERVICE COMPANY 435 Melwood Street

PITTSBURGH 13, PA.

JOBBER INQUIRIES INVITED



Anaconda Copper Tubes are easier to handle. The special Cup Seal* assures unflattened tube ends that can be fed through smaller openings without danger of fouling inside surfaces. This method of sealing also keeps the interiors of the tubes clean, bright and dry. Before sealing, tubes are thoroughly dehydrated.

Anaconda Refrigeration Tubes are 99.9% pure copper, specially deoxidized to increase

their corrosion resistance. They are manufactured according to A. S. T. M. specifications B68-43. Uniformly soft, they bend easily, and can be flared without cracking.

Anaconda Copper Refrigeration Tubes are available in all standard sizes up to and including 34" O.D. They are stocked by jobbers in 25, 50 and 100-foot coils. Longer lengths on special order.

BUY WAR BONDS - Saved dollars mean saved lives



naconda Kefrigeration lubes

FRENCH SMALL TUBE BRANCH OF THE AMERICAN BRASS COMPANY

Subsidiary of Anaconda Copper Mining Company-General Offices: Waterbury 88, Connecticut In Canada: ANACONDA AMERICAN BRASS LTD., New Toronto, Ontario

Monitor --

rosley

Craig h

s mana

1929, W

ngineeri

refrige

promo

engine

ey he

the er

Frigida

Mr. Cra

his effo

impro

iti-aircr has b

for

for ere

mond

appro

Inspect

for a

ld be

static

The

er is

man. 19.50

inet.

static

ng

Concluded from Page 1, Column 4) ills, and other products, according Mr. Quinn.

"You Can Succeed as an Indepenent Home Appliance Dealer" is the itle of a new booklet outlining the pproach and the pitfalls in the etail appliance business which onitor's 60 distributors are presentg to 20,000 prospective appliance edlers. Of this number some 6,000 re expected to be chosen for nitor's retail franchises.

"There are countless opportunities returned veterans in this field replace the many thousands of liance dealers who were forced discontinue business during the ar, provided OPA does not arbirily reduce the trade margins as threatens to do," declared Mr.

"While before the war few retail sinesses held greater promise than ne sale of home appliances, no busiss proved more disappointing and aught with failure for the indendent dealer," he said, citing sevral reasons for dealer failures.

Lines were too limited, and some ealers attempted to establish a



AIRO Wholesale CATALOG

of Refrigeration and Air Conditioning ARTS - TOOLS - SUPPLIES the sooner you'll understand why ou'll like to buy from Airo Supply."

> Write today on your letterhead, please.

AIRO SUPPLY CO. (NOT.) WHOLESALE ONLY 2732 N. Ashland Ave., Dept. B Chicago 14, Illinois

Heads Freezer Firm Sales Manufacturers Must



heads sales of all Deepfreeze products.

business and make a living from one or two major appliances, when there are actually 20 to 30 items that should make up a complete line, he contends

The 60 distributors forming Monitor Equipment Corp. operate outlets in the following 61 cities, covering virtually every state:

Portland, Me.; Boston, Worcester, Mass.; Providence, R. I.; Hartford, Conn.; New York City, Albany, Elmira, Rochester, Buffalo, N. Y.; Newark, N. J.; Allentown, Philadelphia, Pittsburgh, Harrisburg, Pa.; Baltimore, Md.; Washington, D. C.; Richmond, Va.

Charlotte, N. C.; Columbia, S. C.; St. Petersburg, Fla.; New Orleans; Jackson, Miss.; Birmingham, Ala.; Atlanta, Ga.; Memphis, Nashville, Tenn.; Louisville, Ky.; Ashland, W. V.; Cincinnati, Columbus, Cleveland, Toledo, Ohio.

Detroit, Saginaw, Mich.; Milwaukee; Chicago; Indianapolis, Ind.; Minneapolis, Minn.; Des Moines, Davenport, Iowa; St. Louis, Mo.; Little Rock, Ark.; San Antonio, Houston, Dallas, El Paso, Tex.; Oklahoma City, Okla.

Wichita, Kansas City, Kan.; Lincoln, Neb.; Sioux Falls, S. D.; Fargo, N. D.; Butte, Mont.; Denver, Col.; Salt Lake City, Utah; Phoenix, Ariz.; Seattle, Wash.; Portland, Ore.; San Francisco, Los Angeles, Calif.

Give OPA Price Lists

WASHINGTON, D. C .- Manufacturers of consumer durable goods are required by the Office of Price Administration to supply the agency with copies of their current catalogs and price lists on or before July 15, 1945, OPA announced last week.

Three copies should be filed with the manufacturer's OPA district office. The extra copies will be sent to the regional and national offices for their files.

In addition, manufacturers are asked to put OPA on their mailing list for any new notifications sent to the trade concerning prices, terms of sales, or changes in designation for articles manufactured. Copies of these notifications should be furnished the OPA district office within 10 days after being issued to the

These filings are required to aid OPA in establishing ceiling prices for consumer goods of new manufacturers in line with existing ceiling prices for the same or comparable items. The filings also will assist the price agency in checking the prices of new goods put out by oldline manufacturers.

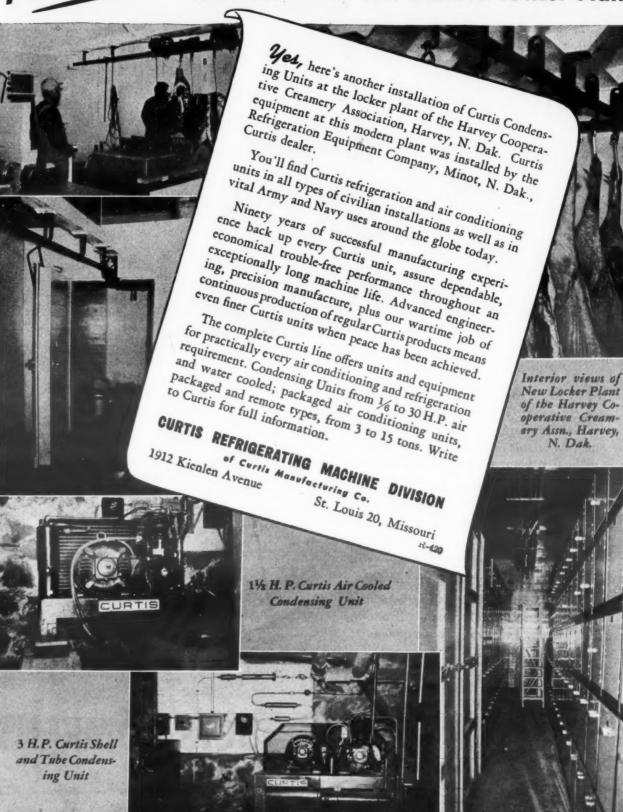
For new items of consumer durable goods, manufacturers' applications for maximum prices under the fourth pricing method of the general consumer durable goods regulation will hereafter be filed directly with the 93 OPA district offices

The fourth pricing method provides a means of obtaining maximum prices for new lines of goods introduced by a manufacturer.

STANGARD Prime Surface COLD PLATES For Maximum Refrigerating Efficiency THE STANGARD-DICKERSON 46-76 Oliver Street . Newark 5, N. J. STANGARD KNOWS REFRIGERATION Copyright 1945 by The Stangard Dickerson Corporation

BUY MORE WAR BONDS

Another Dependable CURTIS Refrigeration Installation at No. 7



Service Engineers Should Know ...

"VIRGINIA" METHYL CHLORIDE IS REALLY LABORATORY TESTED

- the content of each and every container large or small — is analyzed 3 separate times.



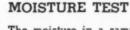
BOILING POINT TEST

1. A measured sample from each cylinder must be water-white in color and when boiled to dryness must record within 25/100 of 1 degree a constant boiling point of minus 23.8°C. This test detects unwanted hydrocarbons, dirt and oil impurities.



ACIDITY TEST

The acid content in a sample of known weight must not exceed 6 parts per million; low acidity prevents copper plating and oil sludging.



3. The moisture in a sample of known weight must not exceed 80 parts per million; - low moisture prevents freezing at expansion valve and refrigerant break-down.

The name "V-METH-L" on the cylinder is your guarantee of quality. Sold by refrigeration supply jobbers everywhere.

VIRGINIA

WEST NORFOLK, 76 BEAVER ST., NEW YORK 5 131 STATE ST., BOSTON 4 Agents for Kinetic's "Freon - 12" - "Freon - 22" - "Freon - 11

MANUFACTURERS

Get Sales Results on Commercial Refrigeration Items in-

MILWAUKEE

HENRY COLDER CO. 1825-29 W. Pond du Lac, Milwaukee



Atlanta Tampa **Jacksonville** Charlotte

"The South's Largest Refrigeration Supply Jobber"

Food Conservators Is Our Only Business

All our energy and resources are devoted to their development and production. Write for particulars.

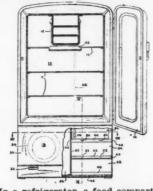
Master Manufacturing Corp. Sioux City, Iowa 121 Main St.

700,000 Master Food Conservators in Use

PATENTS

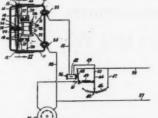
Weeks of May 15 & 22

2,375,851. REFRIGERATION APPARATUS. Milton Kalischer, Longmeadow, Mass., assignor to Westinghouse Electric & Mfg. Co., East Fittsburgh, Pa., a corporation of Pennsylvania. Application Sept. 27, 1943, Serial No. 503,910. 9 Claims. (Cl. 62—103.)



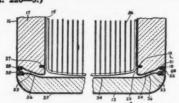
1. In a refrigerator, a food compartment, an evaporator for cooling the same, a lower compartment, a partition dividing said compartment into a first and second section, refrigerating machinery disposed in said first section and operatively con-nected to said evaporator, a receptacle positioned in said second section, means for conducting water resulting from de-frosting of said evaporator into said receptacle, a storage bin also formed in said lower compartment adjacent said first and second sections, and means for causing air to flow first over said receptacle, then in contact with a wall of said bin and then over said machinery.

2,375,859. REFRIGERATION APPARATUS. Gerald P. Marcy, Longmeadow, Mass., assignor to Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., a corporation of Pennsylvania. Application Dec. 6, 1940, Serial No. 368,769. 6 Claims. (Cl. 62—4.)



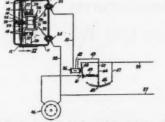
1. In a mechanical refrigerator, the combination of an insulated chamber, an evaporator for cooling the same, mechanism for supplying refrigerant to said evaporator, a control for said mechanism comprising an electro-magnet including a current-conducting winding, a temperature-responsive device, magnetic material associated therewith, said temperature-responsive device being adapted to move said magnetic material in the magnetic field of said magnet to change the impedance of said winding in response to changes in temperature of said temperature-responsive device, said temperature-responsive device being in heat exchange relationship with said evaporator and means responsive to changes in the impedance of said winding for controlling the supply of refrigerant to said evaporator. In a mechanical refrigerator, the

2,375,880. REFRIGERATION APPARA-TUS. Orland H. Yoxsimer, Mansfield, Ohio, assignor to Westinghouse Electric & Mfg Co., East Pittsburgh, Pa., a cor-poration of Pennsylvania. Application Feb. 5, 1943, Serial No. 474,769. 1 Claim.



In refrigerating cabinet construction comprising inner and outer shells having concentric openings in the front of the cabinet to provide access to a food storage compartment defined by said inner shell,

(Concluded on next page, Col. 1)



CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$2.50 per insertion. Limit 50 words.
RATES for all other classifications \$5.00 per insertion. Limit 50 words.
Advertisements set in usual classified style. Box addresses count as five words, other addresses by actual word count.
PAYMENT in advance is required for advertising in this column.

POSITIONS AVAILABLE

DISTRICT sales supervisors wanted.

Nationally known manufacturer of refrigeration equipment has openings for district sales supervisors. Sales and district sales supervisors. Sales and engineering background necessary. State full details, education, experience, salary expected. Box 1738, Air Conditioning & Refrigeration News.

VETERAN or experienced refrigeration counter-man needed by a well established Central States refrigeration parts jobber.
A good position for one who can qualify.
Write giving particulars. Box 1737,
Air Conditioning & Refrigeration News. WANTED: Service men on strictly com-mercial refrigeration, with at least three years experience. Location Maine. Box 1742, Air Conditioning & Refrigeration

CHICAGO TERRITORY. Refrigeration sales engineer. Large, rapidly expanding refrigeration sales and service company. Excellent opportunity for man capable of handling all types commercial refrigera-tion and air conditioning. Good salary and commission. Unlimited contacts with all types of businesses through large service organization. Give full experience. Box 1740, Air Conditioning & Refrigeration News.

HAVE OPENING for service man in radio and appliances including automatic washers. Must be capable in making repairs and also supervise service department and contact dealers. If interested address Box 4429 Jacksonville, Fla. Give experience and references.

WE REQUIRE thoroughly experienced, responsible man, engineering background, take charge sales for Midwest. Product is recognized leader in its field and is sold to manufacturers and jobbers. Age 30-38. Remuneration excess of \$7,000 yearly to man who qualifies. Give complete history, including photograph. Box 1727, Air Conditioning & Refrigeration

DRAFTSMAN and engineer for heating ventilation, and air conditioning. KROESCHELL ENGINEERING CO., 215 West Ontario St., Chicago.

EXPERIENCED refrigeration cabinet design engineer. War work at present. Excellent postwar opportunity. Box 1723, Air Conditioning & Refrigeration News.

APPLICATION ENGINEER: Wanted by APPLICATION ENGINEER: Wanted by Midwestern manufacturers of heat transfer equipment. Must be familiar with technical and practical applications of refrigeration and air conditioning products. This position essential to War Effort and permanent future in postwar. Write advising full qualifications, experience, and salary expected. Box 1694, Air Conditioning & Refrigeration News.

MAN for commercial refrigerator production on coolers, cases, etc. Capable of drafting, designing, engineering, and handling complete factory operation in small plant with an old time firm located central U. S. Offering best of opportunity to qualifying party. Write Box 1743, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

70 CLOSE COUPLED centrifugal water pumps, %-hp. to 5-hp. motors, all single phase, 60 cycle, 110-220 volt units. Equip-ment new and in original crates. Priced for quick turnover. For details write Box 1741, Air Conditioning & Refrigera-tion News.

DRY BEVERAGE coolers 15 to 32 case capacity, slanting sliding doors, fast cooling. Also reach-ins 16 to 72-cu. ft. capacity. Remote and self-contained, prewar construction. Compressors in sizes ¼ to 1 hp. Immediate shipments. Low prices. No priority. Write or wire prices. No priority. ACECO, Las Vegas, Nev.

NEW CHIEFTAN air cooled condensing units complete with low pressure controls and in original factory crates. % hp. \$80.83, ½ hp. \$108.87 each. Quantities of 10 or more 10% discount. AA3 priority required. All prices crated F.O.B. Kansas City, Mo. 25% with order. ARCTICAIRE REFRIGERATION CO., 3939-41 Broadway, Kansas City, Mo. Tel. Westport 9667.

DRY BEVERAGE coolers. Double duty New wall type dairy and vegetable display cases 6-feet and 8-feet long. New milk cooler, no priority 4-can \$220; 6-can \$245. Frosted food cabinets, self-contained Reach-ins, Walk-ins, com-pressors, diffusers. JORDON REFRIG-ERATOR CO., 235 N. Broad St., Philadelphia 7, Pa.

FOR SALE: Prefabricated sectional new walk-in storage coolers, all sizes metal walk-in storage coolers, all sizes.

10 gal. water coolers. New bottle coolers.

Frosted food cabinets. Water and air cooled condensing units. Write for list and prices. EDISON COOLING CORP., and prices. EDISON COOLING CO. 310 E. 149th St., New York, 51, N. Y.

PRANCHISES WANTED

MANUFACTURERS' REPRESENTATIV with several years experience in Centa and South American countries, offers and South American countries, offers provide aggressive sales and engineers representation in that territory to manufacturers of refrigeration and a conditioning equipment and supplies will handle only non-competing lines of an exclusive basis. Apply Box 17 Air Conditioning & Refrigeration New WISH TO establish relations with movemed manufacturers of Househol refrigerators, air conditioning, and leplants. AMERICAN REFRIGERATO CO., P. O. Box 500, Calcutta, India. WANTED: DISTRIBUTION for all line CO., P. O. Box 500, Calcutta, India.

WANTED: DISTRIBUTION for all line of refrigeration and supplies. Have display space. Experienced service departments and well experienced sales for GULF STATES REFRIGERATION APPLIANCE CO., 519 Carondelet & New Orleans, La.

nges, soliquely to outer the flateaker stipacent substantial

e inner

de of the round the her side eans on

eaker st ner shell

Sigford

eapoli

s, retu

KRAN

NEW

Having

KOLD-H

425 N. Gra

1728 5. Chico

POSITIONS WANTED

REFRIGERATION ENGINEER, execut American, experienced in application and service engineering of domestic commercial, industrial refrigeration and application and the service experience. air conditioning. Four years experienthrough Latin American markets. Flue Spanish and Portuguese, some Frend Fully qualified to assume full responsibility as export manager or foreign beautiful. are. Ap bility as export manager or foreign brand manager. Apply Box 1735, Air Cond tioning & Refrigeration News.

BUSINESS OPPORTUNITIES

ESTABLISHED mid-west manufactu established mid-west manufacture finned coils and blower units with excellent future has expansion program requiring either Sales Manager or Chi Engineer experienced in heating, refineration, and air conditioning with \$30.0 to \$50,000 to invest. Box No. 174 Air Conditioning & Refrigeration News





ELECTRICAL ENGINEER

to head electrical division of Engineering Department of nationally known refrigerator manufacture Must be able to handle developme Must be able to handle development work, design, and solution of electrical problems on fractional HP motors, thermostats, relays, and other electrical devices. At least five to ten years experience in this field required. State qualifications and experience. Box 1726, Air Conditioning & Refrigeration News.

VALVES AND FITTINGS for Refrigeration

NORTHERN INDIANA BRASS CO. ELKHART, INDIANA

CHIEF INSPECTO

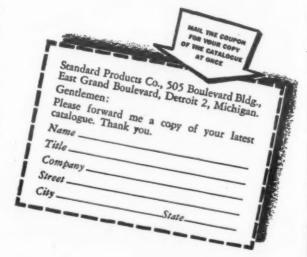
Chief Inspector to head inspection division of nationally known hous manufacture hold refrigerator Must be a graduate of an at credited engineering college witten years experience in refrigeration or related fields. Require thorough knowledge of machine shop technology and assembly pract State qualifications ence. Box No. 1734, experience. Conditioning & Refrigeration New



TO HELP you in your product planning, THE I STANDARD PRODUCTS COMPANY has just compiled a comprehensive brochure which contains many valuable suggestions in the use of plastics, molded rubber and steel stampings.

Attractively illustrated in this new brochure are STANDARD PRODUCTS COMPANY'S full line of widely diversified products which include: thermo-plastics, thermo-setting plastics and mechanical rubber goods-glass run window channel, automotive hardware and munitions.

Copies of this interesting brochure will be gladly furnished on request-fill out the coupon at the right and mail it to us today.



THE STANDARD PRODUCTS COMPANY

General Offices and Research Laboratory

505 Boulevard Bldg.

Woodward Ave. at E. Grand Blvd.

Detroit 2, Mich.



the first time Imperial Flaring Tools are especially valuable under current conditions. They help speed up tubing connection work and they make joints that are tight and stay tight.

IMPERIAL BRASS MFG. CO., 565 S. Racine Ave., Chicago 7, III.

No. 195-F Flaring Tool. Flares 1/4' 5/16", 3/8", 1/2" and 5/8". O.D soft copper, brass or aluminum thing. Yoke is made so that it can be slipped over bar instantly wither twisting or turning. Order Imperial tools from your Job

Patents (Cont.)

ENTATIV in Central s, offers engineeri

engineerin rritory for and a l suppliering lines of Box 173 ation New

Household B. and i

or all lin

Have di vice depar sales for RATION ondelet

R, executi

application applic

experien
ets. Flue
me Frenc
ll respons
reign bran
Air Conc

TIES

nanufact

tion Ne

ATION

OTOR

nufacture velopme

this field

tion

ASS CO.

CTS

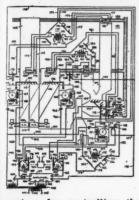
units

on er progr or Ch ing, refri with \$30,0 No. 17

D

(Concluded from preceding page) (concluded from preceding page)
id inner shell having side, top, and
stom walls, the edges of two adjacent
alls of said shells having flanges lying
betantially parallel to the front of the
binet and extending towards one
other the combination of a thin breaker
rip bridging the space between said
agges, said breaker strip extending
sliquely forwardly from the flange of
the flange of the inner shell, said
the flange of the inner shell, said
gaker strip also having a flat surface
instantially in the plane of the wall of
the inner shell to which said breaker
rip is adjacent, said breaker strip also
aving a groove adjacent said flat surtine shell to which said breaker
rip is adjacent, said breaker strip also
aving a groove adjacent said flat surtine which groove engages said flange on ring a groove adjacent said flat sur-ring a groove engages said flange on inner shell, said groove being formed the breaker strip continuing along one de of the flange on the inner shell, then ound the edge thereof and along the her side of said flange, and spring leans on said outer shell for biasing said strip towards the flange of the

1375,988. CONTROL APPARATUS. plis H. Gille, St. Paul, Minn., and John Sigford, Wabash, Ind., assignors to inneaPolis-Honeywell Regulator Co., Minspolis, Minn., a corporation of Dela-are. Application Aug. 28, 1941, Serial 6, 408,594. 3 Claims. (Cl. 236—91.)



A system for controlling the temture of the air in a space, comprising combination, temperature changing as, return duct means for conveying from said space to said temperature r from said space to said temperature unging means, fresh air duct means r conveying outside air to said temsature changing means, discharge duct eans for conveying air from said temsature changing means to said space, unper means in said discharge duct, ofor means for operating said damper sans, a resistance bridge circuit having ans, a resistance bridge circuit having first element with an appreciable tem-



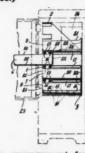
Kold-Hold NEW LOW SIDE PLATES

Having Greater Efficiency rpentine Plates for locker plants, sharp freezing binet liners, and beverage cooling. Streamline Truck Plates for refrigerated transportation.

KOLD-HOLD MANUFACTURING CO. Lansing 4, Mich.

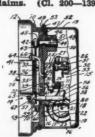
perature coefficient of resistance and perature coefficient of resistance and exposed to the air temperature in said return duct, a second element with an appreciable temperature coefficient of resistance and exposed to the air temperature in said fresh air duct, and a third element with an appreciable temperature coefficient of resistance and exposed to the air temperature in said dispersion of the sai perature coefficient of resistance and exposed to the air temperature in said discharge duct, means for applying an alternating voltage to said bridge circuit, and means responsive to the phase relationship between the output voltage of said bridge and said first named alternating voltage for controlling said motor.

DRAWER ARRANGEMENT POB REFRIGERATORS. George H. Clare, New York, N. Y. Application Nov. 22, 1943, Serial No. 511,265. 1 Claim. (Cl. 312—150.)



A drawer arrangement for refrigerators A drawer arrangement for refrigerators comprising a rectangular frame adapted to fit into the food compartment of a refrigerator and having two parallel vertical side portions which, when said frame is inserted into a refrigerator, are adjacent to the inner side walls of the food compartment; a plurality of short parallel rows of rollers in spaced relation to each other secured to the front parts of said side portions; a ledge behind each row of said rollers rectangularly protruding from said side portions and being slightly downwardly inclined towards said row of said side portions and being slightly downwardly inclined towards said rollers so that the top surface of the front portion of each ledge is slightly below the highest point of the adjoining rollers and a plurality of drawers which are open at the top and at the front, and whose side panels have rear end portions which, together with the drawer rear panels, extend upwardly above the greater portions of said side panels so that the upwardly extending portions of said side panels of each drawer engage the rear rollers of the rows thereabove to limit the outward movement of the drawers, and each drawer having a perforated bottom and being carried by two opposite rows of said rollers and by two opposite ledges, all substantially as described.

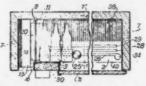
2,376,092. COMPENSATED REFRIGER-ATOR THERMOSTAT. Burton E. Shaw, Bristol, and Earnest P. Swanson, Goshen, Ind., assignors to Penn Electric Switch Co., Goshen, Ind., a corporation of Iowa. Application July 14, 1942, Serial No. 450,862. 3 Claims. (Cl. 200—139.)



1. A refrigerator thermostat comprising a base of insulating material, a casing on one side thereof having temperature responsive control means therein and responsive control means therein and having openings for the passage of air therethrough, a second and closed casing on the other side of said base having temperature responsive compensating means therein, said temperature responsive control means being subjected to ambient temperature flowing through its casing and to heat generated by the passage of current through said temperature responsive compensating means being responsive only to heat generated by the flow of current through said thermostat, and a thrust pin of insulating material extending through said base for mechanically and non-thermally connecting said temperature responsive oase for mechanically and non-thermally connecting said temperature responsive compensating means with said temperature responsive control means to readjust the control means and thereby lower its differential of operation in response to heat generated by the flow of current through said thermostat.

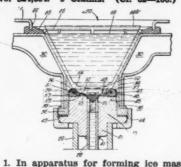
2,376,561. SHELF FOR COIN-CON-TROLLED VENDING REFRIGERATORS. Milton Is. Smith, Chicago, Ill. Applica-tion May 19, 1941, Serial No. 394,112. 7 Claims. Cl. 312—45.)





3. In an apparatus of the type wherein a row of bottles roll along an inclined shelf as the foremost bottle of the row is discharged from the shelf, means for preventing skewing of a bottle as it rolls on the shelf, said means comprising a round member of a weight at least as great as that of a bottle, said member resting on the shelf and pressing against the last bottle of the row of bottles adjacent that end of the bottle which tends to turn in a direction opposite that of the direction of rolling of the bottle on the shelf, and means for guiding said member as it means for guiding said member as it moves on the shelf in contact with the last bottle of the row of bottles.

2,376,819. AUTOMATIC ICE MAKER. Theodore W. Bundell, Abington, Pa., assignor to Philico Badio & Television Corp., Philadelphia, Pa., a corporation of Delaware. Application Peb. 26, 1944, Serial No. 524,054. 9 Claims. (Cl. 62—106.)



1. In apparatus for forming ice masses, a mold member adapted to receive water to be frozen, means for freezing the water to form an ice mass, and thermosensitive means for freeing said mass from the mold member, said thermosensitive means including a bi-metallic element movable by snap action between advanced and normally retracted positions with respect to the mold cavity and in with respect to the mold cavity and in said retracted position being in reactive relation to the ice mass and having a portoin thereof free for limited movement away from said mass.





LARKIN COILS, 519 Memorial Dr. S.E.

Atlanta, Ga. DOLE



Multi-Purpose

STEEL TUBING

Government Surplus Property To Be Sold By **Reconstruction Finance Corporation**

2 per Foot-F.O.B. Bronx, N. Y.

Large lots of this low-carbon steel tubing manufactured by the well known Bundy Tubing Company, are offered for continuing sale by RFC, a Disposal Agency designated by the Surplus Property Board. The tubing is cold-drawn, copper coated, inside and out, .248 O.D., .128 I.D., 16 gauge, SAE 1010, lengths of 8, 10 and 12 feet.

This is tubing made for the Army for the production of 30 calibre ammunition and is surplus because of change in specifications. It is suitable for a wide variety of applications for which the prime materials are unobtainable due to wartime restrictions.

The entire lot is unused and in excellent condition. Samples are available and inspection can be arranged.

It's Easy to buy from RFC

Address your order or request for complete information to the office listed below or your nearest RFC Disposing Agency.

70 PINE STREET, NEW YORK 5, N.Y.

Agencies located at: Atlanta • Boston • Charlotte • Chicago • Cleveland • Dallas • Denver • Detroit Houston • Kansas City, Mo. • Los Angeles • Minneapolis • New Orleans • New York • Omaha • Philadelphia · Portland, Ore. · Richmond · St. Louis · Salt Lake City · San Antonio · San Francisco · Seattle

BUY WAR BONDS

Dealers --

(Concluded from Page 1, Column 3) the listing of these items may be changed from time to time, for the present the following types will probably be eligible:

Condensing units, lowside assemblies, self-contained air conditioners (other than room coolers), blood plasma units, rivet coolers, industrial low temperature systems, farm milk coolers, reach-in refrigerators, walkin refrigerators, other types of insulated enclosures except those which might tie up with items on the "no rating" list.

Items for which ratings will NOT

be given include:

Room coolers, beer coolers, bottle beverage coolers, bulk beverage coolers, counter coolers, display cases, water coolers (all types), evaporative coolers, farm freezers, home freezers, ice cream freezers (20 quart and less capacity), ice cream cabinets, cube makers, low temperature equipment for food storage, salad coolers, soda fountains.

It was learned that WPB is not allocating any materials for any commercial refrigeration or air conditioning item production of which was prohibited prior to May 1. This means that manufacturers of such equipment must take their chances in getting such equipment wherever they can find it.

The supply of both completed products and materials is so "spotty" that even WPB officials can't get much of an accurate picture of the

current situation.

"As far as we can determine, the condensing unit situation is 'tight,' " declared one official. "We know, of course, that the Army and Navy haven't cut back their refrigeration programs any-in fact, have really increased them.

"Then somebody in the field tells us 'why I just got a unit from suchand-such manufacturer on a AA-5 rating' but when we check up on this story with the manufacturer he tells us he couldn't deliver on such a rating for months."

The WPB men also seem pretty, positive that the revocation of Order

HEAT TRANSFER EQUIPMENT COIL COMPANY SAINT LOUIS, MISSOURI



In the West it's REFRIGERATION SERVICE INC. Pacific Coast Supply Jobber

since 1928 Your letterhead will bring our latest

"The Liquid Line"

3109 Beverly Blvd. LOS ANGELES 4, CALIF.





IGERATION ENGINEERING Inc.

L-123, governing the production and distribution of fractional horsepower motors, won't have any practical effect for some time to come. In fact, with the absence of some of the rating patterns provided under the order, producers of civilian goods may find it harder than ever to procure motors.

On the brighter side, the government agency sees aluminum and brass mill products becoming some more readily available in the very near future, and a somewhat better situation on steel. However, stainless steel and tin are two items which are very critical, it is said.

New Firm In Buffalo

BUFFALO - Lorenzo Refrigeration Service Co. has been organized here by Anthony DiLorenzo, 428 West Hazelton St., Kenmore.

No Further Aid on Materials, Says WPB

WASHINGTON, D. C .- The policy of WPB will be to grant no supplemental allocations of controlled materials beyond the levels already scheduled for the third quarter of 1945, except when absolutely necessary to assure needed additional production of items of highest urgency

to the civilian economy, WPB says.
This was announced, WPB said, in a move designed "to wean civilian industry away" from a dependence on Government allocations now that cutbacks in war production are freeing increasing amounts of materials previously needed almost exclusively for the war and war supporting

This means that the production of civilian items above the levels already approved for the third quarter will have to be made without priorities assistance and with materials bought on the "free" market.

Hussmann-Ligonier Stock Is Offered

CHICAGO — A banking group headed by W. E. Hutton & Co. has offered 30,000 shares of \$2.25 cumulative preferred of Hussmann-Ligonier Co. at \$51 subject to prior subscription by common stockholders.

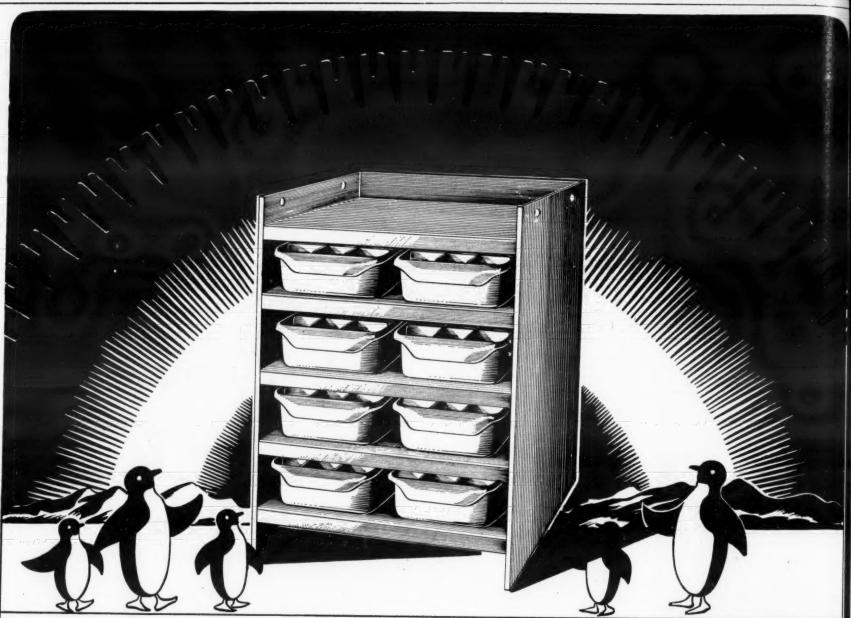
The company, manufacturer of commercial refrigeration equipment. plans to use the proceeds to finance redemption of present preferred, increase working capital, and provide \$500,000 for expansion of facilities.

'Spot Checking' of Metal Users Planned

WASHINGTON, D. C .- To assu compliance with inventory contra orders the War Production Boar plans to "spot check" plants of the chief users of steel and other meta sometime after July 1, it was a nounced here.

Since three or four durable good industries are the principal users steel, and a small number of plan in these industries take much of the steel used, enforcement of inventor control should not be difficult, believ WPB officials.

The check on inventory will propably be handled by a method similar to the controlled material plan audi which WPB has been making durin the past 18 months, it was indicate



Bush ICE MAKING COILS

All Bush Ice-Making Coils are constructed with steel casings and sufficient copper tubing in each shelf to insure rapid freezing of ice. Built to highest specifications, Bush Ice-Making Coils are part of the equipment of every Liberty ship which goes down the ways. Hundreds of these fine units have been installed in Army camps, hospitals, mess halls . . . and they have been used in many other war-essential as well as civilian applications.

Available in two types:--Standard Coil and Finned Coil Models-with tray capacities ranging from single-row

three-tray models to double-row 24-tray models, capable of producing from 42 to 576 ice cubes at one freezing. No matter what your requirements, there is a Bush Ice-Making Coil to meet your needs efficiently and economically.

Write for new Bush Catalog which illustrates and describes the Bush Ice-Making coil . . . and other Bush Heat Transfer Products. For advanced engineering . . .



HARTFORD, GONNECTICUT

415 LEXINGTON AVENUE, NEW YORK * 549 W. WASHINGTON BOULEVARD, CHICAGO EXPORT ADDRESS: 13 EAST 40TH STREET, NEW YORK * CABLE "ARLAB"